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PSYCHOLOGICAL MEDICINE

A SHORT INTRODUCTION TO PSYCHIATRY

WITH AN APPENDIX ON PSYCHIATRY ASSOCIATED WITH WAR CONDITIONS

\mathbf{BY}

DESMOND CURRAN, M.B., F.R.C.P., D.P.M.

PSYCHIATRIST AND LECTURER IN PSYCHOLOGICAL MEDICINE, ST. GEORGE'S HOSPITAL. CIVIL CONSULTANT IN PSYCHOLOGICAL MEDICINE TO THE ROYAL NAVY

AND THE LATE

ERIC GUTTMANN, M.D., M.R.C.P.

FORMERLY CLINICAL DIRECTOR, THE MAUDSLEY HOSPITAL, LONDON, ETC.

FOREWORD BY

SIR JOHN J. CONYBEARE, M.C., D.M.(Oxon.), F.R.C.P.

PHYSICIAN TO GUY'S HOSPITAL, LONDON

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PREFACE TO THIRD EDITION

by the prolonged illness, borne with great courage, of Dr. Eric Guttmann. By his death in April 1948 Psychiatry in Great Britain has sustained a major loss. He was a charming man, of wide learning and great wisdom; he was the best of friends and the most generous of collaborators; he always made the major contribution, both in planning and in execution, to this small work.

We hoped to make substantial alterations and to omit the appendix on Psychiatry associated with war conditions. I believe, however, that had he lived Dr. Guttmann would have agreed that in the present state of world affairs the removal of this appendix would have been premature. Numerous alterations and certain additions will, nevertheless, be found, especially in the sections on Mental Deficiency, Schizophrenia and Hysteria.

Dr. Guttmann was always anxious that this short Introduction to Psychiatry should not grow materially in size. It has been difficult to avoid this since Psychiatry has made such rapid advances in the treatment of many conditions. A full discussion of these therapeutic techniques and the indications for them would, however, be inappropriate in a work that only hopes to provide a preliminary orientation to the subject; and hence, although more space has been devoted to modern methods of treatment such as shock therapy, prefrontal leucotomy, narco-analysis, abreaction and "social therapy," these methods of treatment and investigation have only been dealt with in the broadest outline. What to do and when must be learnt as the result of clinical experience and cannot just be looked up in a short textbook.

Finally, I should like to express my gratitude to many friends for their help and advice, and above all to the publishers for their courtesy, efficiency and patience.

D.C.

December 1948.

FOREWORD

HREE years of war have done much to bring psychiatry into the limelight. Experience has shown that the stress of war both in the Services and on the home-front has brought to the surface great numbers of psychiatric patients, who in days of peace would have managed to struggle along unaided and undetected. But although the Services, including the Emergency Medical Service, have organised a well-staffed psychiatric service it must not be imagined that the ordinary medical officer, whether in the Services or in civilian practice, can afford to leave to experts the care of patients suffering from mental disease. Practically every disease, whatever systems of the body it affects, may have a concomitant psychiatric aspect. Moreover, great numbers of patients whose illness is primarily a mental one display symptoms referred to the various organs, and are treated by the doctor rather than the psychiatrist. It has been estimated that at least thirty per cent. of medical out-patients seek advice for ailments which are primarily psychoneurotic in origin and in the Services the position is not far different.

The excuse for the publication of a new book on psychological medicine is therefore the necessity for every practitioner, whether within or outside the Services, to familiarise himself with the more practical aspects of psychiatry. There are, it is true, already many excellent and exhaustive volumes on the subject, as is shown by the bibliographies given by Dr. Curran and Dr. Guttmann in this book. Most of these, however, are relatively long and often stress perhaps not so much the practical as the psychopathological aspects of mental disease. In these days when time for study is limited and luggage space, at any rate for doctors in the forces, is even more limited I feel that there is a place for such a book as this, which is for a work on psychiatry remarkably lucid,

eminently practical and light to transport.

Whereas in the war of 1914–18 many of the affective disorders and hysterical reactions were attributed to underlying organic changes, as for instance shell-shock and soldier's heart or D.A.H., it is now realised that the pathogenesis of these conditions is primarily psychological, and that the symptom complexes were not infrequently the product of ill-judged medical advice. As the authors point out in their Appendix on War-time Psychiatry every person, however stable, has his "breaking point," and one of the most important duties of the unit medical officer, whatever service he be in, is to take steps to rescue the individual before he breaks. In other words, prevention is better than cure. Only too often by the time a man is referred to the psychiatrist he is past cure.

The Appendix on War-time Psychiatry will, I feel, be of the greatest value to medical officers in the Services. Fortunately most of the functional states that arise in war are simpler to deal with than those seen in civil life, determined as they are by external stress rather than by internal conflicts. A good unit medical officer, who has the confidence of those under his care, can often by judicious exercise of firmness, sympathy and common sense

prevent unnecessary reference to a psychiatric service.

The authors stress a point which is not always appreciated. Most psychiatric conditions present symptoms of a physical kind. Only too often such patients are referred to hospital where the most searching investigations-X-rays, test meals, blood examinations, chemical and metabolic investigations, electrocardiograms, even gastroscopy—are carried out in a ruthless determination to exclude any possibility of physical disease. Such a regime carried out in hospital, often over many days or even weeks, only too often permanently shakes the confidence of a patient. Nor does this criticism hold good only with psychiatric conditions. applies equally to personnel referred unnecessarily to hospital for the so-called investigation of a cardiac murmur, albuminuria, dyspepsia and countless other conditions. No investigations, however searching, can completely exclude the presence of organic disease in its earliest stages, and at any rate in war-time the primary duty of the medical officer is to maintain the effective strength of his unit at its maximum. It is clearly better that the diagnosis of the occasional case of physical disease should be delayed rather than that large numbers of potentially useful men should be rendered hypochondriacs. Almost all necessary investigations can be carried out adequately in an out-patient department and the hospitalisation of personnel where hospital treatment is not essential can do nothing but harm.

Although it is clear from internal evidence alone that one of the authors is dealing with naval personnel, the same general principles apply to the other Services. It must not be thought, however, that the book deals primarily with service medicine. For the student or practitioner it is equally valuable as a common-sense and practical

approach to psychological medicine.

J. J. CONYBEARE.

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CHAPTER I

INTRODUCTORY

province is the study, prevention and treatment of all types and degrees of mental ill-health, however produced. The preventive aspect of psychiatry is often called mental hygiene.

Put in the most general terms, (mental ill-health is experienced subjectively as a substantial impairment of comfort and happiness, and is shown objectively as a substantial impairment of efficiency or of the capacity for satisfactory social relationships.)

It is, of course, true that some or all of these effects are usually produced as the result of physical disorder or disease; and although general medicine has in the past been too little concerned with such psychological and social considerations, yet there would be general agreement they are always important aspects of every illness and that due attention should be paid to them in every case. Psychiatry, however, whilst emphasising the importance of the commonly neglected psychological aspect of illness, makes no claim to the whole of medicine as its domain; and it is only when the psychological aspect should be regarded as predominant that a patient becomes more specifically a psychiatric problem.

In view of the importance of the mental aspects of health and sickness, the basic principles of psychiatry should be learnt by every medical student and some knowledge of psychiatric methods of investigation and treatment should be regarded by the practitioner as an essential part of his equipment. The need for this knowledge will become increasingly apparent with the growth of social medicine. The application of psychiatric methods of treatment frequently involves social considerations so that (it is inevitable that the two fields, namely that of psychiatry and of social medicine, should overlap) Just as the psychiatrist must apply social methods of treatment, social medicine should avail

1

itself of psychiatric knowledge and should apply psychiatric techniques.

The number of individuals suffering from mental ill-health often comes as a surprise. Thus, at the end of the year 1945, the total number of persons suffering from mental disorder notified as under care in England and Wales was 146,027, about 3.5 per thousand of the population, and 24,281 were admitted to mental hospitals for the first time during that year. The number of in-patients increased by about 1,700 annually before the war.

In addition there were, in 1945, 99,608 mental defectives under statutory care, 52,788 of them in Institutions and Houses provided under the Mental Deficiency Act; but this falls far short of the total number of mental defectives in England and Wales which has been estimated at 300,000 (8 per thousand of the population or 1 in 125). The figures for Scotland are comparable.

There are no equally reliable figures available as to the

number suffering from minor forms of mental ill-health (frequently masquerading as physical disease) of insufficient severity to necessitate institutional care, but none the less potent causes of personal misery and social inefficiency. 20-30 There can be no doubt, however, that this group is an enormous one. For example, a medical specialist in the Army made the diagnosis of neurosis in 231 out of 810 patients referred to him for an opinion (28.5 per cent.); a general practitioner in a suburban London area considered that similar troubles accounted for 30 per cent. of all his attendances; and a medical referee in an urban district of the industrial Midlands considered that 10 per cent. of his cases presented purely psychiatric problems and an additional 14.5 per cent. suffered from psycho-somatic disorders with an undoubted neurotic component. Relating these last figures to the total number of the insured population in question, the risk of psychiatric illness worked out at between 3.8 and 7.6 per thousand of the population in each year. Again Russell Fraser, working for the Industrial Health Research Board, found that during the course of six months, 10 per cent. of workers in the engineering industry had suffered from a definite and disabling neurotic illness, and a further 20 per cent. from minor forms of neurosis. Neurotic illness caused between a quarter and a third of all absence from work due to illness; neurosis was responsible for the loss of 1.09 per cent. of the men's possible working days, and of 2.40 per cent. of the women's.

It must be emphasised that, as in several of the examples quoted, the large group of those exhibiting the minor forms of mental ill-health is not solely composed of patients who are clearly recognised as being neurotic, such as the types who haunt their doctor or drift into the out-patient departments of general hospitals where they are regarded as a burden on the physician's time and patience. The presenting symptoms in many psychiatric conditions are of a physical kind and the differential diagnosis from physical disease can be a matter of considerable difficulty. Consequently, many psychiatric cases are not recognised for what they are, or the recognition is unduly delayed, to the great detriment of the patient; for a ruthless determination to rule out any possibility of physical disease beyond the last shadow of doubt before diagnosing a psychiatric condition may ruin a patient permanently both in pocket and self-confidence. Nor is it only that a fuller examination reveals with increasing frequency the essential psychiatric nature of the disorder in individual cases; advancing knowledge has led to the recognition of this for whole groups of diseases or syndromes. Thus, "disordered action of the heart" was considered to be primarily a problem for internal medicine in the 1914-1918 war and these cases were dealt with by the general physician or cardiologist and seldom by the psychiatrist. Nowadays, however, "effort syndrome" is widely recognised to be a neurosis (and none the less so because of the large constitutional component) and is being treated increasingly by psychiatric methods if not always by psychiatrists. The essential issue is not, of course, who should make the diagnosis or conduct the treatment but that it should be made correctly and conducted properly.

It is probable that this frequent failure or undue delay in the recognition of psychiatric illness has arisen for several reasons.

Firstly, the medical student in his preclinical studies is rightly imbued with the importance of using exact methods. He is, for example, taught their application in anatomy and physiology. Very little, however, has so far been done to introduce him to the methods of psychology and the social sciences; and even if private interest leads him to read semipopular books on these subjects, he will probably be struck
by their failure to live up to those scientific standards he has
acquired in connection with more exact disciplines. Believing
that "science is measurement," he will tend to ignore the
mental aspects of his patients, half unconsciously arguing that
what cannot be measured may be safely omitted; or even
should be omitted for the sake of the scientific ideal. A major
fallacy in this position is that medicine is not an exact science.
It has been well said that the practice of medicine is the
practice of a practical art which uses scientific methods when
it can. The physician cannot rely upon a calculating machine
or ready reckoner, but must train his judgment in assessing
a large number of variables, amongst which psychological
factors are not the least important.

Secondly, medicine has in the past been more concerned with pathology than performance and has largely judged its success against a pathological rather than a sociological criterion. More attention has thus been paid to pathology, whether in the anatomical or physiological spheres, than to abnormalities in social or psychological adjustment. Hence, perhaps, it is always drummed into the student that to miss an organic condition is the cardinal sin in medicine, much more heinous than to miss a psychological one. Little emphasis is laid and little direct instruction given on the importance of assessing a patient's efficiency at work or his happiness and social relationships, and it is implied that this can safely be left to unaided common sense. Thus the student tends in later life not to consider the possibility of a psychological maladjustment until all possible physical causes have been excluded, whereas he should in addition seek for positive evidence of psychiatric disorder at an earlier stage. Fear of missing the organic also frequently leads to an incorrect emphasis on some minor physical abnormality. A thorough physical examination is rightly regarded as essential; but a reasonably thorough assessment of the mental and emotional aspects of all patients should equally be regarded as essential; and it can usually be achieved without undue difficulty by taking a careful history with the requisite background of knowledge. It must also be emphasised that a careful history followed by a thorough physical examination can be trusted to exclude the vast majority of physical ailments and that frequent recourse to special investigations is often due to lack of self-confidence on the part of the doctor rather than to a proper passion for thoroughness (when it is not due to mere laziness, for to order another investigation is often less trouble than to go into the history in detail). The social background is frequently of crucial importance and medical students could greatly benefit from regular attendances at the Lady Almoner's department.

Thirdly, certain neurotics are difficult, demanding and aggressive people, critical and ungrateful and apt to arouse impatience or the emotion of moral disapproval. emotions tend to be transferred to all neurotic cases, so that many physicians show reluctance to stigmatise a patient by making this diagnosis owing to the belief that the diagnosis of a psychiatric condition necessarily carries with it some degree of moral condemnation. An important factor in inducing this attitude is the mistaken view that the essential genesis of all psychiatric disorders resides in an inability to face life and a consequent attempt to "escape" from difficulties. As will be seen later, this view is an incorrect one. Still, there can be no doubt that psychiatric illness does carry with it at present a certain stigma, not only in the minds of physicians but also in the minds of the patients themselves. The reluctance shown by many physicians to make a psychiatric diagnosis is consequently reinforced by the patient's attitude.

Fourthly, although an increasing number of physicians take an intelligent interest in the psychological aspect of medicine, others are confronted with the predicament that to make a psychiatric diagnosis leaves them with no very clear idea of what can or should be done. This is an additional factor which accounts for their reluctance to make it.

The delay in assessing the true state of affairs that comes from these causes has often resulted in the appropriate treatment being postponed until it is too late to be fully effective. This is particularly unfortunate because suitable treatment, of no very elaborate kind and fully within the capacity of the general practitioner, could make many patients happier and salvage them for active and useful participation in the life and work of the community.

This mention of the community raises once more that most

X

important aspect of psychiatry, namely its close relationship with social medicine, to which brief allusion has already been made. A fuller recognition of the environmental and social factors in the production of ill-health is obviously and rightly going to assume increasing importance. Psychiatric conditions are often due mainly to social circumstances. Striking examples of these social neuroses are not only afforded by the effects of legislative enactments, such as the Workmen's Compensation Acts in the production of compensation cases. They can also be seen in the greater incidence of sickness amongst insured persons compared to those who are not insured: in the neurotic reactions amongst soldiers that are not due to enemy action but to the conditions of service life; and in the similar reactions of those who were directed during the war into certain occupations under the Essential Works Order.

The increased regimentation of modern life often leads to a reduction in the opportunity, or what is sometimes felt to be the need, for personal initiative, and produces discontent. To be dissatisfied is frequently the basis of a neurotic state and waverers may readily be induced to succumb by social legislation which guarantees them some degree of social security if sick who, but for this social legislation, would have continued working in spite of their discomfort. Modern health insurance, for example, does not in these circumstances become an unqualified blessing.

It may be considered that, in any future programme of education and mental hygiene, more emphasis might profitably be laid upon duties rather than rights and also upon the point that, throughout the ages, a modicum of discomfort and unhappiness has been the lot of mankind and that therefore to have these experiences was not necessarily evidence of illness.

To the social neuroses mentioned above must also be added the large band of the socially undesirable and in-adequate—the social problem group—consisting of criminals, prostitutes, drunkards and many more in whom the importance of the psychiatric aspect is gaining increasing recognition. And even in groups which might not on first thought be regarded as psychiatric problems at all, psychiatric factors will be found to be involved which open up new and

promising avenues of approach. Chronic unemployment, absenteeism and accident proneness may be mentioned as examples from very different fields.

Taking, then, all these groups into consideration, it is probably not too much to say that the magnitude of the problem which confronts psychiatry is much larger than that provided by any one branch of medicine and is comparable to that confronting general medicine as a whole. Psychiatry cannot reasonably be regarded as a minor speciality.

The time is happily over when psychiatry was confined to mental hospitals, cut off from the world and from the rest of medicine by their walls, their reputation and often enough their remote geographical situation in the country; but the facilities for the teaching and practice of psychiatry of an extra-mural type are still very far from satisfactory. outstanding need is a closer link between psychiatry and general medicine, which would be to the advantage of both. The provision of neuropsychiatric units, with in-patient accommodation, as an integral part of at least all the main teaching hospitals and centres is clearly desirable and is long overdue; for out-patient facilities alone are as inadequate as they are in other branches of medicine. demonstrated very strikingly the shortage of trained psychiatrists: but this would have been less obvious if the medical student had received a better psychiatric education. practitioner who has to deal now and who will have to continue to deal with the mass of minor psychiatric ailments does not need a specialist training. He does, however, need some basic knowledge of psychiatric principles and facts. is not overwhelmingly difficult to obtain a working knowledge of clinical psychiatry which is sufficient for most practical purposes, so that the cases likely to respond to quite simple methods of treatment can be recognised. Nothing could be more mistaken than the view that a patient has either some physical ailment or needs a prolonged analysis. important to be able to recognise those others amongst whom good results cannot reasonably be anticipated no matter what is done, but who, nevertheless, can be greatly helped; for many patients who are not curable are eminently treatable.

Finally, apart from the numerous problems of a more specific psychiatric kind with which all practitioners are

confronted, the recognition of the inevitable psychological aspect in every patient can never be neglected. As Wilfred Trotter has said,["The ordinary patient goes to his doctor because he is in pain or some other discomfort and wants to be comfortable again; he is not in pursuit of the ideal of health in any direct sense. The doctor, on the other hand, wants to discover the pathological condition and control it if he can. The two are thus to some degree at cross purposes from the first, and unless the affair is brought to an early and happy conclusion this divergence of aims is likely to become more and more serious as the case goes on. The good doctor, therefore, has to learn to serve two objects at the same timethe diagnosis and treatment of the patient's ailment on the one hand, and to keep him comfortable on the other. I speak of keeping the patient comfortable in the broadest possible sense to include matters of the mind as well as of the body; it is an art which the student must teach himself, and the practice of it is one of the worst burdens put upon the doctor by the fact that man is not a reasonable creature. In the exercise of this art he will have to convince the patient of his interest in the case, he will have to let him feel that something significant is being done all the time, and he will have to teach him that his object must be health, not comfort. When these purposes are clearly visualised they are easy enough to attain. The most important is that the doctor should convince the patient of his personal interest. The simplest way to do this is to be interested, and the effort will have its reward. the deep unreason with which all patients approach the medicine man, his interest is more potent than knowledge and skill, the latest development in science, or the utmost virtuosity

The attention of all doctors is forcibly drawn to this "art which the student must teach himself" when, after qualification, he is confronted with neurotic patients; and although this art cannot readily be taught, psychiatric knowledge and technique may be learnt which can greatly help in the development and practical application of natural aptitudes and talents.

CHAPTER II

AETIOLOGY OF MENTAL DISORDER

SYCHIATRY does not aim at the classification on aetiological grounds of disease entities, but at understanding the mental conditions of individuals. This can only be done by assessing the physical and mental stresses due to environmental causes in the light of their effect upon the physical and mental make-up or "psychosomatic constitution" of the individual exposed to them. Interwoven as all these factors necessarily are in the production of a given psychiatric state, it is convenient to separate them for the sake of description and understanding.

The basic aetiological principle in psychiatry is therefore the principle of multiple aetiology, so that factors which may be grouped as

- (1) psychological,
- (2) physical, and
- (3) constitutional,

must be considered in every patient. It is most important to recognise that these groups of factors—psychological, physical and constitutional—are invariably present and operative, although they may vary greatly in their practical importance from individual to individual and from case to case. And it is also most important to recognise that these three groups of factors have been moulded into their present strengths and shapes by their interaction in the past. Thus, for example, not merely the physical constitution of a man, but his mental attitude towards illness, may have been fundamentally altered by sickness as a child, by how this sickness was taken by his family and by the effects it may have had on his activities at home and at school.

It would clearly be unreasonable to expect either the normal or abnormal behaviour of human beings that issues from the complex inter-reactions of these three factors to be wholly explicable in terms of only one member. Just as there is never a single and simple cause of normal behaviour so there is never a single and simple cause of mental ill-health. (Any aetiological diagnosis of this kind must always remain an over-

simplification)

What are often called environmental factors may affect a patient in ways which are multiple and diverse. For example, unemployment, by reducing income, may lead to malnutrition (physical factor); or it may undermine a patient's self-confidence (psychological factor). Further, malnutrition may lower the resistance to mental stress and the consequent depression may interfere with appetite and general metabolism. Finally, the resultant picture will largely depend upon the patient's mental and physical equipment.

The necessity for a multiple approach to these problems under the above headings of mental, physical and constitutional can sometimes be seen in an almost diagrammatic way. Thus a man lost his job and became profoundly depressed. He had not done so when he had lost his job on a previous occasion, but on this occasion he lost it while he was sick with influenza. Even with the co-operation of these two factors, the occurrence of a severe depression is an unusual event; but this patient showed his constitutional predisposition by the fact that his mother had committed suicide whilst in a mental hospital for melancholia)

Few cases show their mixed actiology quite so clearly, but all possess it, and it is one of the tasks of psychiatry to try and assess the relative importance of various causes and their interaction in a particular case.

It may be well to illustrate the importance of this basic principle of multiple aetiology by pointing out some common difficulties that have resulted from over-simplification.

Over-stressing Physical Causation.—The view is sometimes held, although less frequently than in the past, that mental illness must always possess an essentially physical cause. The line of thought seems to be briefly as follows. It is assumed that normal mental function possesses some physical substratum or correlate and that abnormal mental function must possess this as well; and it is consequently deduced that mental disorder can always be regarded as symptomatic of a morbid process of a definitely physical kind.

It is, of course, true that the development of mental symp-

toms can quite frequently, as in senile dementia or febrile delirium, be regarded as the more or less direct consequence of physical disorder or disease. But it would be wrong to assume that this must always be so. Psychological factors can also be of predominant importance; and there is no logical or scientific reason whatever for the assumption that mental symptoms may not result as the more or less direct consequence of psychological causes, or for that matter, that they may not be mainly due to constitutional causes. In brief, any of the three groups of factors can assume the major position of importance.

PHYSICAL FACTORS AN INADEQUATE EXPLANATION MENTAL SYMPTOMS EVEN WHEN THE MAIN CAUSE.—Moreover, even when, as in senile dementia or febrile delirium, the occurrence of mental illness can be more or less directly attributed to physical causes, it will be obvious that the study of such impersonal physical factors cannot possibly account for the individual or personal differences in the mental symptoms displayed. The explanation of the individual psychological symptomatology (content) must clearly be sought in the personal biography of the individual concerned. give a crude illustration, a patient cannot harbour the hallucination of seeing a snake unless he has heard of or seen one. Again, it is only possible to explain why the suspicions of a paranoid patient are directed against the Jews or the Catholics in one case, and against Cyclists or Freemasons in another, in the light of the experiences, prejudices and attitudes of the individual patient concerned. Finally, the whole pattern of the reaction that is produced by a physical agent may be determined by hereditary predisposition, as in the case quoted when a severe melancholia was precipitated by influenza.

Over-stressing Psychological Causation.—Mental illness, of whatever origin, must have a mental aspect. This perhaps explains, if it does not excuse, the tendency to the opposite extreme to that of the organically minded, namely the view that mental symptoms are entirely dependent on mental causes. This, of course, is equally erroneous as is the view that mental symptoms are entirely dependent on a physical cause. It is very important, when dealing with mental illness, to be aware of the danger of accepting a spurious psychogenesis. This may result in the following way. The

study of the biography of a patient often discloses psychological experiences that are clearly related to the mental symptoms he shows. But, (not infrequently, these psychological experiences are only important as regards the choice of psychological symptoms displayed) and it is very easy to make the mistake of ascribing to the psychological experiences that determine the content of the psychological symptoms displayed, aetiological importance in the production of the whole reaction which they do not possess, and which should be sought elsewhere in the physical or constitutional field.

The point can be made quite clear by a simple illustration. Thus, endogenous depression (melancholia) is a condition primarily of constitutional origin which is frequently characterised by self-reproach. Now there are few who have not some cause for self-reproach; and the particular topic of self-reproach may be given and accepted as the cause of the melancholia, when it should really be regarded as a consequence.

(FLIGHT FROM REALITY AND ESCAPE INTO ILLNESS)—Another common source of difficulty, closely associated with the problems of spurious psychogenesis and content determination that have just been considered, centres round the belief that mental illness should be regarded as an attempt to escape from difficulties or, as it is commonly expressed, as a "flight from reality." The conception has the charm of simplicity, but seems clearly to result from a confusion of thought. It is in a sense correct to say that anybody who is not efficient is out of touch with reality; and it is even more legitimate to describe many mentally disordered individuals as being out of touch with reality. But it is neither correct nor legitimate to turn a metaphorical description into an aetiological explanation, and to assume that a mentally disordered individual is out of touch with reality because he—whether consciously or unconsciously—wanted so to be and succeeded in his desire. It should be obvious that the flight from reality concept is a psychological concept, and is therefore incomplete in so far as physical or constitutional factors are of importance. It will, for example, be obvious that, although certain of the delusions of a general paretic, such as that he is the possessor of great wealth, may be expressions of

his desires, yet they do not account for his illness, but merely for certain of the symptoms he shows in it. It is essential to realise that the same principle holds true for many other types of mental disorder, both mild as well as severe. The point is an important one, for the escape notion probably accounts for a good deal of that curling of the lip with which mental ill-health is so frequently regarded. As will be seen later, the escape conception should be reserved for hysterical syndromes and for the development of secondary symptoms and elaborations in other types of reaction. As has been pointed out, it is a purely psychological concept and, as will be seen later, it is often only one out of several possible psychological explanations.

The Necessity for a Close Linkage between Psychiatry and General Medicine.—It should be evident, therefore, that since physical and constitutional as well as psychological factors are always present, and may be extremely important in producing mental symptoms, it follows that psychiatry cannot be sharply separated from general medicine. A general medical training and a sound knowledge of general medicine are, therefore, essential for psychiatric study and practice; and it may be added that the opposite applies equally.

Each of these three groups of factors—psychological, physical, and constitutional—will now be considered in greater detail. It will soon be apparent how artificial is their separation and how much they are interrelated and overlap.

Psychological Factors.—(Adaptation is normally achieved as a smooth and almost imperceptible process, and, as a rule, consciousness of the need for readjustment only appears as the result of some rather definite change in the individual or his environment. Such a change may occur suddenly, owing to such happenings as illness or injury, the death of a near relation, or the loss of a job; or it may take place gradually, as when a man ages, or is faced with increasing economic liabilities.

Failure in adaptation obviously results from a discrepancy between the demands made upon an individual and his ability to cope with them. These demands include those which an individual makes upon himself, owing to his ambitions and social and ethical standards, as well as those which are induced by the external situation in which he finds himself placed)

EMOTION THE INTERMEDIARY.—It must be clearly recognised that the demands made by the environment are never in themselves the cause of mental disorder. Environmental stresses always act indirectly, either as physical factors or by virtue of the emotions which they produce. As regards the latter, it can be said that, (from the psychological point of view, mental symptoms are always produced by emotional disturbance, or by mental activity associated with emotional disturbance.) It is often alleged that something else is responsible, such as overwork; but it can usually be shown that it is not the overwork itself, but the emotional strain under which it has been done, or which has driven the patient to undertake it, that explains the breakdown. (Indeed, it can almost be taken as an axiom that overwork is an euphemism for overworry.)

INDIVIDUAL EMOTIONAL REACTIONS.—Emotional disturbances can, then, be regarded as essential for the development of mental symptoms, which tend to result when the emotional disturbance is of abnormal intensity or duration.

Fear is probably the most common and powerful single emotion in the production of mental ill-health, but disappointed hope, anger, disgust, or in fact any emotion of sufficient intensity may be "converted" into symptoms if it comes up against barriers that prevent its normal discharge or "abreaction."

The intensity of an emotional reaction may sometimes be comprehensible in the light of events that would shake anybody, such as bombing or bereavement. More often, however, the intensity of an emotional reaction is only comprehensible with knowledge of the particular significance and meaning of the event for the individual in question. Similarly, the reason for the duration of an emotional reaction may either be obvious or not at all obvious; and particular difficulty is apt to be experienced when there is a long latent period between the cause of its origin and the development of the symptoms that result. That this should happen is not at all surprising, for worry can be cumulative in its effects. Another somewhat neglected source of difficulty is that it is sometimes forgotten that decrease of tension can be as

emotionally upsetting as increase of tension. This is well seen in the "reactions after action" or in the normal experience of feeling worse after danger than during it. Thus, in psychiatric work, it will often be found that the causes of emotional disturbance have their origin not in the present but in the past. These points are of importance, because we tend to regard as normal any emotion we can readily understand as being justified by the circumstances, and to regard as unjustified, and by an easy step as therefore reprehensible, any emotion we cannot so understand. The issue is not, however, whether emotional disturbance should be experienced in some ethical sense, but the more practical problem of why it has been experienced, which may help us to do something about it; and since people may react to the same situation in different ways, the psychological causes of an emotional reaction must often be sought for in the individual rather than in the objective nature of the situation with which that individual is faced) (Without knowledge of the past history and personality of the individual, understanding of his behaviour may be impossible and it will always be incomplete)

Thus, although the event is the same for each, the reactions of a group of officers boarded out of the Army may be widely dissimilar, one becoming depressed, another aggressive and truculent, and a third accepting his discharge with a sigh or a smile of relief; and these very diverse reactions only become comprehensible in the light of the personality, past history and future prospects of each individual concerned.

INNER STRESS AND "MENTAL CONFLICT."—The clue to the emotional disturbance that produces mental disorder must, therefore, often be sought for within the individual rather than outside him. Conflicts of internal origin, which involve the higher emotions attached to values, ambitions, standards and ideals are on the whole more important in producing breakdowns than are the emotions that might be thought to flow as a natural consequence from external misfortune.

THE IMPORTANCE OF IGNORANCE AS TO THE NATURE OF THE STRESS.—A man may be and often is painfully and adequately aware of the nature of his problems and be able to deal with them. He may fully realise that he is home sick and terrified and yet remain in the front line. But often enough people are not accurately aware of the nature of the stress or conflict

going on in their minds; and then its solution becomes a more difficult matter; for it is harder to cope with a situation the true nature of which is not understood or which is mistakenly supposed to be other than it is. Thus the secretary of a business man developed a functional dyspepsia. This was attributed to overwork, for which there was some evidence, and to dental sepsis, for which there was not. After a holiday and dental extractions had not resulted in improvement, for she relapsed as soon as she returned to her duties, it finally emerged that the real cause of her trouble was that she had fallen in love with her employer; this she had not admitted to herself since she was a girl of strict standards and he was a married man. Her feelings had, in fact, induced her to work long hours for him and she had persuaded herself that her emotion was one of admiration only. After she had realised the true nature of her difficulties, she obtained another job and did well.

THE PREVALENCE OF PARTIAL IGNORANCE.—Although this may seem an extreme case, lack of knowledge of the factors that induce our feelings and dictate our actions is inevitably present in some degree in every one; and even if it is not always obvious in ourselves, it is obvious enough in those about us.

Ignorance of this kind plays an important part in the production of certain types of mental disorder. It must, however, be remembered that unfortunate or unwise habits of reaction can easily be regarded as a contributory cause of mental trouble when they should really be regarded as an early symptom of its development. Thus, evidence of instability and a facile capacity for self-deception shown in childhood may really be the early manifestation rather than the cause of an abnormality of character of the hysterical type shown in later life.

Some Reasons for Ignorance.—This lack of knowledge is to some extent inevitable, for somatic factors are not susceptible to introspection and even an elementary knowledge of psychosomatic relationships is beyond the scope of many patients. Such patients will be fully aware of the physical accompaniments of an emotional state, such as palpitations, but will fail to realise their connection with a glaringly relevant emotional upset. The average man is astoundingly deficient in introspective desire or capacity and his self-knowledge is often only a vague awareness which he finds it

difficult to put into words. This absence of clear formulation has an important bearing upon the remarkable therapeutic results that can follow a diagnostic interview which leads a patient to formulate for the first time and to express his feelings in words. Few psychiatrists have not had the experience of receiving profuse gratitude for "putting things so clearly "after an interview during which they have scarcely opened their mouths.

Nor will it be found that lack of accurate self-knowledge is confined to the simple or to the tongue-tied or inarticulate; the product of those who pride themselves on their ability, introspective gifts and verbal facility, is often subtly selfsatisfying rather than accurate.

Introspection and Infallibility: some Reasons for RESERVE.—It would therefore be a mistake to suppose that introspection is normally, or ever, exhaustive and infallible; it is in fact very difficult to make a just self-estimate. As has been observed, many will willingly complain of their poor memory, but few of their poor intelligence or judgment; yet it can scarcely be claimed that the latter phenomena are less frequent or serious in their effects. It is as easy, and probably much more common, to make mistakes in describing what is in or on our minds, as it is to make mistakes in describing a scene in the outer world. In the one case, as in the other, desires, prejudices and expectations will distort observation and falsify recollection, so that the real constituents of the scene will be ignored, or mis-described, or a wrong attribution of their origin will be made. These phenomena will occur more readily if the results of more accurate introspection or observation are disconcerting or distasteful or in other ways damaging to the self-esteem and thus calculated to arouse emotions of an unpleasant character. Thus a man will pride himself upon his capacity for compromise, when self-blame for weakness would be a more justified judgment; and another will preen himself upon his high standards and the strict discipline he maintains, when those about him clearly recognise his behaviour as but the reflection of his irritable and aggressive personality.

DISTORTIONS OF MEMORY.—Moreover, the same factors that succeed in distorting introspection can distort memory. Unpleasant facts tend to receive preferential treatment in

the normal process of forgetting and this capacity often becomes remarkably increased as the result of emotional disturbance. It will often be observed that patients tend to forget, when giving their work record, the unpleasant jobs which they did not like or in which they did badly. A more dramatic example was a sergeant, of a sensitive disposition, who was the only survivor in his platoon of a group of men who all came from his village. He forgot all details of the actual engagement, the thought of having to break the news to his fellow-villagers facilitating this loss of memory or haziness as to what had happened. Again, another patient was able to recall a quarrel with his wife, but did not recall that during this quarrel he had threatened suicide if she did not behave herself better. This was not a proud memory to retain.

The processes such as have been outlined above are often described as examples of "repression into the unconscious." Repression and Disappearance.—"Repressed" facts

REPRESSION AND DISAPPEARANCE.—"Repressed" facts do not disappear completely; they remain potentially available although inaccessible owing to emotional interference. The less tolerable they are to the conscious mind, the more difficult it is to recover them. Even when recalled or presented, they are often not recognised or correlated because their recognition and acceptance and correct correlation, would be distasteful or intolerable to the personality. It will often be found that, far from being "unconscious," patients are fully aware of unpleasant facts, but manage to keep them in separate compartments. The failure is often one of connection between known events rather than successful removal from the sphere of consciousness altogether.

MECHANISM OF ADJUSTMENT.—Repression affects not only memory and recall and the capacity for correct connection, but it is also operative in the selection and registration of perception. Repression, however, is only one of many mechanisms by which the emotions influence and distort man's image of himself and his world. Freud drew attention to the psychiatric significance of these mechanisms in dreams, where they are conspicuous, and also to their importance in the formation of symptoms. They can, however, be equally well traced in everyday speech and thought and in minor lapses and errors. They are all similar in that they adapt the picture of reality so as to make it emotionally acceptable. This result is

brought about by shifting of emphasis, substitution and similar devices, not the least important of which is sublimation. They are all fundamentally methods of self-protection and attempts at preservation of self-esteem. (In their crudest form they achieve self-deception by the adoption of the policy of the ostrich. It must be emphasised, however, that these "mental mechanisms" are often helpful and may be essential for achieving an adjustment to life, although they may be harmful and crippling to those whom they prevent from realising the true nature of their difficulties, which do 2 not cease to exist because they are not recognised, but which, if correctly recognised, it may be possible to face and to solve.)

The operation of these mechanisms of adjustment can readily be observed in those who are not patients and, as has been hinted, may stop them becoming patients.

THEIR VARIABLE SUCCESS.—A rather crude ostrich policy can, for example, be seen in a certain type of eternal student, who rationalises his fear of the rough and tumble of the world as the search for truth in the life of learning. There are, of course, imperceptible gradations between the ineffective British Museum library addict and the great scholar. Again, many rolling stones are not so much prompted by a love of adventure as by an inner uneasiness which they vainly hope may some day be left behind when they move on.

The classic example of successful sublimation is perhaps afforded by a man of homosexual tendencies and high ideals who emphasises the social value of such activities as that of schoolmaster, rather than the sensual element that may play a part in the choice of this occupation; and who is thereby enabled to do the most valuable work. Whether any failure in adaptation ever occurs may be a matter of chance. Thus, the first intimation in a schoolmaster that anything was amiss was the reflective remark made one day when playing bridge with his headmaster's wife: "What a fine thing a boy's bottom is;" this middle-aged and admirable man subsequently died of a cerebral tumour, the first symptom of which was shown as above. Again, the development of neurotic symptoms can be the almost unavoidable price to be paid for some peace of mind and can represent the best compromise in adaptation that is possible. For example, a crude man with repellant and promiscuous sexual habits

had a charming wife who was an ardent Roman Catholic and for whom the question of divorce was consequently impossible. She developed a condition of chronic invalidism which enabled her to avoid sexual relations but only at the price of considerable discomfort.

There was obviously an excellent reason in the last case why full insight could not be achieved; and a profound depression might have resulted if it had been achieved. It is often startling, however, to observe how the inability to connect facts which are clearly related need bear no relationship to intelligence. Thus, a popular young curate of charm and considerable ability began to develop doubts about religion and shortly afterwards palpitations, sweating and a feeling of collapse, at first only when called upon to preach, but later at other times as well. After exhaustive physical investigations had proved negative, he was referred to a psychiatrist, when the above story rapidly emerged, and it was found that he had made no connection between his religious scruples and the development of his symptoms in the pulpit. This man did, however, see the connection at once and so was enabled to concentrate on his real difficulties rather than upon an unjustified fear of physical disease which had previously been the presenting trouble in his mind.

THE SIGNIFICANT LEVEL NOT NECESSARILY REMOTE.—The significant psychological factors at work can often, as in the case of the curate, be understood with reasonable adequacy by taking a careful history along ordinary lines, and it is by no means always necessary or wise to seek for the essential psychological causes in the remote past or early childhood. The troubles may have their roots there, but the significant level of conflict is frequently of a more superficial kind and has its origin at a later date; or at least can be dealt with satisfactorily without going too far back. Psychological delving into the remote past always involves two dangers, namely, either that of leading the victim along tracks which conform to the preconceptions of the investigator, or of arriving at facts, attitudes or problems which are, or which are supposed to be, so universal that they have little value in explaining individual difficulties. Such aetiological whipping boys as the "oedipus situation" or "inferiority complex" can explain everything and therefore explain nothing. Indeed,

they approximate perilously to the explanation that would be afforded by attributing a patient's condition to his birth, which has, however, the advantage of being quite certainly true.

IMPORTANCE OF CAREFUL HISTORY TAKING.—A careful history is, however, necessary in order to obtain a picture of the patient's type of reaction under varying circumstances of stress and special significance must be attached to the patient's relationship with his family, which plays such a large part in determining his subsequent attitude towards authority and his capacity for showing affection. A careful past history also helps in the understanding of the development of the patient's moral standards; and the solution of his conflicts may only be possible as the result of revaluations in the light of this knowledge. As has already been pointed out, however, it will often be found that early experiences which are alleged to be the cause of mental trouble in later life were, in fact, merely evidence of early instability.

Finally, it must be emphasised once more that since psychological factors are never the only causal factors, psychological explanations must of necessity be incomplete as causal explanations; and that even if they account for the particular symptoms that are shown they may fail to explain why these occurred at the time they did. Thus, the sexual offences of an early paretic may be interpreted in the light of his mother-fixation or his aggressive tendencies towards his father; but such interpretative excursions do not explain why he behaved normally before the time of the offence, and worse than this, no plumbing of psychological depths can bring to daylight the (unconscious) invasion of the brain by spirochetes.

This example illustrates once more the limitations of purely psychological explanations and why it is so mistaken and misleading to regard the unconscious as an explanatory widow's cruse.

THE EFFECT OF MORBID EMOTION.—Emotional upset, however caused, may produce symptoms of either mental or bodily distress or both combined.

A clear recognition that emotional distress produces physical reverberations is of cardinal psychiatric importance. This explains how it comes about that so many patients, who should be regarded as psychiatric problems, do not complain

primarily or at all of mental symptoms, but do complain of physical symptoms. These patients naturally but erroneously tend to believe that physical experiences and physical symptoms have a physical origin, and do not relate their physical symptoms to emotional disturbance because they cannot see the connection, and often do not want to. Their resistance often arises because it is more pleasant to attribute an illness to a potent poison than to a poor personality; the amount of responsibility that must be assumed differs markedly in the two cases. Often enough, however, the failure in association is not so much due to unwillingness to shoulder responsibility as to sheer ignorance. An example of this is afforded by a girl of sixteen, an only child who was brought up in an oppressive atmosphere of genteel respectability. She received her first kiss from an undergraduate towards the end of his vacation, and as she had received no instruction about the "facts of life" she feared that she might have become pregnant and in addition developed abdominal discomfort as a consequence of her emotional perturbation. This confirmed the fears that she did not dare to reveal. Consultation was sought with a surgeon who advised the removal of her appendix, assuring both her and her family that this was the cause of her symptoms. Her appendix was accordingly removed, (it may be suspected that this was one of those surgical operations carried out "to be on the safe side"), and she made an uninterrupted recovery, her symptoms only to return, however, some months later after she was kissed once again by the undergraduate on his next vacation. She was then admitted to another hospital for (?) adhesions following appendicectomy, but on this occasion she came under the care of a surgeon with a keen appreciation of the psychiatric aspect of his cases who referred her to a psychiatrist. The above story rapidly emerged and after suitable explanation her symptoms rapidly disappeared.

Light may be thrown upon the question as to whether the therapeutic result was or was not satisfactory by the fact that when she was last heard of some years later she was rowing in a women's eight.

JIMPORTANCE OF THE CONSTITUTIONAL PREDISPOSITION TO EMOTIONAL REVERBERATIONS.—Bodily symptoms of so-called functional origin will occur more readily if the physical make-

up of a patient is of such a type that it readily responds to emotional disturbance. Thus, certain individuals with a labile vasomotor system readily respond to emotion with tachycardia and others by fainting or by the development of a dyspepsia. A predisposition to different physical effects often seems to run in families. The somatic reactions to emotion of such individuals thus provide a good example of the interrelation of different factors.

It is quite difficult for individuals who are handicapped by the possession of a ready somatic reaction to emotion not to become involved in a vicious circle which, if medically mismanaged, may easily end in a condition of neurotic invalidism.

Physical Factors.—By physical factors are here meant the states of physical disorder or disease that are studied in general medicine such as infections, intoxications, disorders of nutrition and circulation, metabolic illnesses and disturbances of the endocrine system.

Constitutional as well as physical factors of an exogenous type can, of course, be very important in the production of these conditions, which only serves to emphasise once more how artificial is their separation. Those constitutional factors, however, such as heredity, that are more directly concerned in the production of mental disorder will be dealt with later.

The Physical Basis of Mental Disorder.—Sometimes mental changes can be correlated with general brain damage, as in arteriosclerotic dementia, and occasionally particular mental symptoms can be correlated with localised brain damage, as in post-apoplectic aphasia. But in the majority of mental syndromes neither macroscopic nor microscopic changes have been found in the central nervous system. It must, however, be remembered that our present methods of examination are very crude and can as yet tell us little of the presumptive changes in the central nervous system that accompany functional activity, whether normal or abnormal. Electroencephalography may in time help to fill the gaps in our knowledge. It has made valuable contributions to the diagnosis of disturbances of consciousness, of convulsive disorders and certain constitutional anomalies.

Indeed, unless disordered function is the result of permanent structural changes in the brain, the demonstration of abnormal histological findings cannot reasonably be anticipated. It would, therefore, be a mistake to seek for the pathology of mental disorder solely in the pathology of the brain and it would be an even greater mistake to seek it solely in neuro-histopathology. For instance, the most important advance in the study of the pathology of certain schizophrenic disorders has been the discovery by Gjessing of a disturbance of the nitrogen metabolism. The absence of a structural pathology is not a failure peculiar to psychiatry. There are vast fields in general medicine, as for example in the metabolic disorders, where the same holds true.

Just as the importance of physiology is becoming increasingly recognised in general medicine, so is the importance of physiology becoming increasingly recognised in psychiatry; but in psychiatry the physiology of emotion is perhaps the main centre of concern.

The mutual relationship and interdependency between the mental and physical aspect is often particularly well shown in the course of a case of Graves disease. This endocrine disorder, as is well known, may be precipitated by emotional stress; the first symptoms may be those of an anxiety state; and environmental factors may profoundly affect its course, the psychological response to which is largely determined by the endocrine changes.

The Assessment of Physical Factors.—As has been mentioned, physical factors may be of predominant importance in the production of mental illness; and there is no type of mental illness, whether mild or grave, in which physical factors may not play a more or less important contributory part. It must, however, be emphasised that, for the reasons that have been touched on in the introduction, the importance of physical factors is often greatly exaggerated, and that physical abnormality is often coincidental and not causal.

When physical factors are of predominant aetiological importance, as in general paralysis of the insane, the mental changes will be those of an "organic type of mental reaction," the characteristics of which will be described later.

As a working rule it can be taken that, in so far as mental changes resemble less those of an "organic type of mental reaction" and approximate to some other type of syndrome, so does the predominant aetiological importance of physical factors become suspect.

Anything, however, that lowers the general well-being of the patient will facilitate the development of mental disorder in a susceptible subject and hence arises the importance of physical factors as a contributory cause. As the man in the street rightly believes, "worries get a hold" on those who are physically run down in a way they would not otherwise.

PHYSICAL FACTORS OF CRUDE EXOGENOUS TYPE.—Whilst it is true that such things as chronic infections and intoxications should always be sought for and dealt with, their removal or eradication seldom produces that benefit in mental disorder that the student might be led to expect. The frequent appearance in the medical press of striking cases of this kind is apt to give the student a most misleading impression. vague physical causation for mental symptoms that are not of an organic type and which does not in addition produce other physical effects, should be viewed with scepticism. It is well to remember, when confronted with ambiguous symptoms, that the atmosphere of a factory can be vitiated not only by fumes but by a nagging foreman; and that even when a noxious physical agent can be discovered, psychological factors may also be present of equal or higher importance. The symptoms and signs, both physical and mental, of industrial poisons, alcoholism, drug addiction, and of acute and chronic infections are clearly enough defined and should be well enough The diagnosis can be confirmed in many instances by exact tests. (See also Chapter IX.)

In brief, the importance of physical factors of a crude exogenous type has been in the past, and sometimes still is, grossly exaggerated. In the majority of mental disorders no evidence can be found of exogenous physical factors that can reasonably be inferred to possess practical importance. It seems probable that the physical basis of mental disorder should therefore rather be sought in metabolic and other disturbances of a more subtle kind.

ENDOCRINE GLANDS.—There is a two-fold relationship between the nervous system and the endocrine glands. (1) The nervous system is connected with the pituitary by various pathways. It can therefore influence the pituitary directly; and hence the other endocrine glands indirectly through the pituitary. (2) The endocrine glands can affect the function of the nervous system by means of their hormones.

Thus, emotional disturbance can cause alteration in endocrine function; and these, in turn, can affect cerebral function. It is often possible to observe this vicious circle at work in pathological states, but it is usually very difficult to determine where the trouble started or to know what should be regarded as the primary cause.

As the student knows, the interrelationship of the ductless glands is extremely complex. It is often impossible to be certain which gland is primarily affected. It is not, therefore, surprising that few mental anomalies can be considered to be attributable to a specific disorder of a specific endocrine gland. The mere presence of endocrine dysfunction gives little information about matters of aetiological importance; the failure of most mental conditions to respond to hormone treatment is a further fact that favours a cautious attitude. The whole field is, from the psychiatric standpoint, one of promise rather than performance.

There are, however, certain observations that indicate the great importance, if uncertain significance, of endocrine factors. The incidence of psychosis is highest about the age of puberty and the climacteric, and this coincides with profound changes in the function of the endocrine system. Menstruation is often accompanied by emotional disturbance, which can in some women be serious. But we no longer, as in the past, firmly, if vaguely, attribute psychosis to amenorrhoea or regard masturbation as the cause of schizophrenia. For we regard amenorrhoea, which is very frequent in the case of major psychoses, as the consequence of the deranged metabolism accompanying them rather than as their cause; and we now realise that masturbation should be regarded as a normal phase in development and that, for example, in schizophrenia it is a symptom.

Constitutional Factors.—It is generally recognised that the make-up of an individual at any given time is due to both nature and nurture, to the hereditary equipment with which he started and also to what has happened to him subsequently? This view carries with it the implication that the genetic equipment sets a limit to an individual's potentialities. This is accepted as being true in the physical sphere. Thus, a man's height is known to be primarily determined by his heredity; and although his potentialities in this respect can be consider-

ably affected by, for example, nutritional factors, nobody supposes that variations in height are entirely dependent upon nutritional and other environmental influences. Moreover, striking variability in height is recognised as falling within the bounds of normal human variation.

Recognition of the importance of the genetic equipment (a) in setting a limit to potentialities and (b) also resulting in very diverse manifestations that should still all be regarded as falling within the bounds of normal human variation, has not, however, been so widespread for psychological as it has been for physical phenomena. The problems are more complex and more difficult to study so that precise knowledge is more difficult to acquire. Again, some of us, for emotional reasons, are more reluctant to accept what might be regarded as the depressing doctrine of original sin rather than the supposedly more encouraging doctrine of a fall from grace owing to unfortunate upbringing or lack of will power; but there is no reason to suppose that the same principles do not apply in the case of psychological as in the case of physical qualities.

[Intelligence (as measured by intelligence tests) appears, for example, to be quite comparable to height in being mainly dependent upon hereditary elements, or genes, and in exhibiting, by and large, a normal curve of distribution in the population]; that is to say, there are large numbers of medium intelligence, whereas the numbers become smaller and smaller towards the extremes of intelligence, high or low. Although we cannot measure such things as character and temperament in the same way as we can measure intelligence, so that our knowledge about them is more vague, there is no reason to suppose that the whole of mankind starts life with equal endowments or potentialities in these respects. On the contrary, minor variations in every aspect or attribute of character can readily be observed, with extreme variations less common. In other words, a normal curve of distribution exists, just as it does in the case of intelligence and height.

The hereditary factor in mental disorder is, however, seldom of a simple and clearly demonstrable type, as in Huntington's chorea, of which it can in effect be said that the disease will become manifest in the potential victim independent of factors other than those that permit of his survival to a sufficient age to have a chance of developing it.

The importance of the hereditary factor in mental disorder therefore lies in providing a predisposition, which may or may not be made manifest by precipitating factors, both physical and mental. Whilst it is true that, given sufficient provocation, almost any individual may show neurotic symptoms, evidence is accumulating that neurotic and psychopathic phenomena cannot be regarded as types of response to which all human beings are equally liable, comparable to the universal tendency to respond to infection with fever. The susceptibility to particular stresses varies from individual to individual. The differences between individuals cannot be accounted for as solely, or even mainly, due to environmental stresses in the past or present. There is, on the contrary, impressive support for the theory that " the neurotic constitution is predominantly determined by a very large number of the genes of small effect. . . . The neurotically predisposed man is then to be regarded as a man who has more than average susceptibility to environmental stresses of one or a number of kinds: he represents one of the extremes of human variation." (Slater.)

It will be seen from the above that the problem becomes complicated by the fact that a man may be normal or average in many respects, but an extreme variant or abnormal in one or a few. He may thus be conspicuous only by reason of extreme sensitivity or conscientiousness or aggressiveness. A highly specialised predisposition may therefore be present owing to increased susceptibility to specific external stimuli or, alternatively, by setting up internal stress due to the incompatibility of certain character features with other ones.

The concept of the wide range of normal human variability is of considerable importance in understanding psychiatric phenomena; and it may also possess some slight therapeutic value for certain medical students who should not suppose that, because on occasion they experience some of the neurotic symptoms described in this or other books, they should therefore regard themselves as falling into a really pathological group. To experience neurotic symptoms is a privilege shared in some degree by the vast majority of mankind.

A distinction must, however, be drawn between the relative roles in the production of human variation exerted by many genes of small but additive effect and specific genes of large effect. The former can provisionally be regarded as ultimately responsible for variations in intelligence and for character differences in general (amongst which a neurotic predisposition must be included), where the normal and the abnormal fade imperceptibly into one another. The resultant individual may or may not be socially desirable or a social success.

On the other hand, when specific genes of large effect are concerned, a reasonably hard and fast distinction between the normal and the abnormal is much more likely to be observed, as for example in the more clearly cut psychiatric syndromes of manic depressive psychosis and schizophrenia. Just as the ordinary man is most unlikely to fall below an adult height of four feet, and it needs a pathological dwarfism to produce that effect, so is he unlikely to sink into a really profound melancholia.

There is, of course, no reason why specific genes of large effect, resulting for example in a classical manic depressive psychosis, should not be combined in the same individual with many genes of small additive effect, resulting in either an otherwise extremely stable or a highly neurotically predisposed citizen; and manic depressive illnesses can afflict both types of individual.

What has been outlined above represents a convenient working hypothesis, which may help in the understanding of psychiatric cases, and also as to why it is so difficult to obtain or to put forward more exact data concerning the heredity of mental illness in general. Moreover, it must not be supposed that, because environmental effects appear to be strikingly prominent in the picture, they are therefore the sole constituents of it; for the picture seen in life has in fact been limned in outline and sometimes in detail by the genetic endowments. Nor does the demonstration of a clear heredity negative the importance of a constitutional cause. A snub nose does not necessarily cease to be part of the constitutional equipment because all the traceable ancestors had Roman ones; and it is not legitimate to argue in such a case that the snub nose must have been produced by squashing in infancy, although this may have occurred.

The more precise genetic facts that are available concerning the more clearly cut syndromes will be found in the appropriate sections.

Physique.—The psychosomatic background may be demon-

strated to some extent in the patient's physique, and attention has been drawn by Kretschmer to different types which can be observed amongst mental patients as well as in the general

population.

(1) The Asthenic or "Leptosomatic" Type is characterised by a narrow build, an angular profile, and by a lean, dyspeptic, and hungry look. Individuals of this type look taller than they are. Their skin is poorly vascularised and pale, and the distal parts of their extremities tend to be cyanotic. They are flabby and of poor muscular development. Their chest is long, narrow, and flat. The subcostal angle is less than 90 degrees (see Fig. 13).

(2) The Pyknic or "Pyknosomatic" Type is well demonstrated by "John Bull," with his large body cavities and generous distribution of fat about the trunk. John Bull in his younger days—a typical pyknic—had a handsome body with a graceful motor apparatus and small and delicate

extremities (see Fig. 1).

(3) The Athletic or "Athletosomatic" Type is recognised by the strongly made skeleton and muscles and is well seen in a certain type of raw-boned Scot (see Fig. 2). It is less clearly defined than the other two, but is perhaps more definite than other types that have been described, such as the dysplastic.

There is a certain affinity between the pyknic build, cyclothymic make-up and the development of manic-depressive psychoses on the one hand, and on the other hand between an asthenic build, a schizoid make-up, and the development of schizophrenic reactions. These facts are of interest, and may have some practical value in the assessment of certain mixed and complex mental reactions. But it must be emphasised that these associations are by no means invariable and that there are many exceptions. Here, again, it has been found that people fall into a normal curve of distribution, so that any typing represents an arbitrary classification of restricted usefulness.

Fig. I—Pyknic Type.



Fig. 2—Athletic Type.

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#### CHAPTER III

## SYMPTOMS IN MENTAL DISEASE

T is essential for the student to know what are the more important symptoms that may be shown in mental disorder, and that he should also be clear as to the meaning of the technical terms that have been used to describe them. Contrary to popular belief, fewer technical terms are used in psychiatry than in other specialities. This has grave disadvantages, since it leads to the frequent employment of well-known terms, with a wide general meaning, in a technical sense. For example, hysteria means something quite different to the psychiatrist than it does to the average lay person.

Unconsciousness.—An unconscious patient is neither aware of his environment nor capable of responding to psychological stimuli in a psychologically understandable way (inaccessibility). He is subsequently incapable of recalling any mental activity during the period in question. States of unconsciousness are best observed after severe concussion, in deep anaesthesia, and as a final stage of many intoxications. Between unconsciousness and consciousness there are various types and degrees of disturbed consciousness.

DISTURBANCES OF CONSCIOUSNESS.—These disturbances are mainly due to physical causes, and the general characteristics may be given as follows:—

- (a) Deficient Grasp.
- (b) Disturbances of attention and concentration.
- (c) Slowness of thinking.
- (d) Disturbances of memory (retention).
- (e) Lack of goal—directed initiative in thought and action.

Consequently the patients show:-

- Disorientation;
- Disconnected and often incomprehensible behaviour;
- Subsequent amnesia.

Three intermediate states between consciousness and unconsciousness are often recognised:— (1) Dimming or Clouding of Consciousness (often rather unfortunately called "Confusion").—Less than normal rather than anything abnormal is experienced. All mental processes are slow. Association of ideas is scanty. Thinking is difficult or impossible. These patients are apathetic and bemused, show no initiative, are easily fatigued, and it is hard to attract or to hold their attention. They tend to pass into a dreamless sleep, stupor, or coma. In mild cases the patients may answer and behave rationally under examination, but readily relapse when left to themselves. In cases of moderate severity, although out of touch with their surroundings, they may be roused to answer simple questions correctly. And in severe cases it may just be possible to get an occasional appropriate response by forcible questioning or commands.

(2) Delirious States.—The consciousness is clouded, and the continuity of mental processes is interrupted or shattered by abnormal experiences such as hallucinations. Restlessness is

a most common feature.

(8) Twilight States.—There is a peculiar alteration of consciousness and personality for certain periods of limited duration. They are mainly encountered in epilepsy (vide p. 122), and also, rarely, in hysteria.

ATTENTION is the term used for describing the experience that certain objects are in the centre of consciousness, whilst others lie more towards the periphery. This distribution may be achieved either voluntarily or involuntarily. Attention may be disturbed in various ways:—

(1) It may be difficult or impossible to arouse the attention of the patient. This generally occurs in organic reactions resulting in disturbed consciousness; but it may also occur in states of retardation, perplexity, or self-absorption due to

depression or schizophrenia.

(2) It may be difficult or impossible to keep the attention of the patient (a) because the patient returns to predominant preoccupations (depression and schizophrenia); (b) because the attention of the patient is readily distracted by stimuli from the outside, this distractibility preventing concentration on any given subject for any length of time (manic and certain organic pictures); (c) because the attention may have been caught and kept by some incidental stimulus in the external environment from which it cannot be detached (certain organic states).

DISTURBANCES OF VOLITION, GENERAL ACTIVITY, MOTOR BEHAVIOUR.—Lack of initiative is most frequently seen in neurasthenic states, and in depressive and schizophrenic psychoses, but may also be observed in lesions of the frontal lobe or the basal ganglia.

Psychomotor Retardation denotes a reduction of spontaneous speech and movement, tardiness of response, and slowness of speech and action. It occurs in depressions and when very severe it may result in depressive stupor. Stupor, with no response of any kind, is, however, a rare phenomenon in uncomplicated depressive states. Subjectively, most retarded patients are aware of an unpleasant round of thoughts as if, so to speak, their mind was revolving in neutral and could not be got into gear; and with this is combined an extreme difficulty in taking decisions. Subjective retardation of this type is often present when not sufficiently severe to show up in much slowing objectively.

Psychomotor Hyper-activity, together with an increased speed of action, is seen in manic states. Impulses may follow one another so rapidly that none is properly carried out or completed.

In Catatonic Excitement the motor behaviour is usually more disintegrated, and features like stereotypy (monotonous repetition in speech and movements), mannerisms, and grimacing, are often observed and are highly characteristic.

Perseveration, as opposed to stereotypy, denotes the repetition of a movement or action in spite of the patient's effort or desire to produce a new one. It is often most marked in the field of speech, so that the patient gets stuck with a word or phrase from a previous reply or idea, and can be difficult to distinguish from aphasic disturbances. Perseveration is commonly seen in all organic states.

Stupor means complete suppression of speech, movement, and action not accounted for by profound disturbances of consciousness. It is commonly produced by schizophrenic disturbances of will, but it may occasionally result from extreme retardation in melancholic patients. Flexibilitas cerea (a peculiar type of "wax-like" rigidity of the muscles), catalepsy (the tendency to keep up postures which have been imposed), and negativism (automatic resistance to all outside stimuli) are symptoms that are often found in

catatonic stupors, but also in some conditions due to cerebral disease.

Suggestion means influence by processes other than reason; suggestibility is the capacity—varying in each individual—of yielding to such influences. This normal attribute is increased in states of disturbed consciousness. It is strikingly present in hypnosis, and in schizophrenics it may reach the extreme degree of automatic obedience. Echopraxia and echolalia, i.e. the automatic repetition of actions which are seen, or of words which are heard, are particular examples of this.

Abnormal impulses, such as kleptomania (the impulse to steal), pyromania (the impulse to set fire to things), are better classified with compulsive or obsessional phenomena, i.e. actions carried out under the subjective feeling of being forced to do them, either without or against intention or desire.

Feelings of Passivity (or of being influenced) describe those conditions when patients believe their experiences are produced by some outside agency or force, or that they are under the attempted or successful direction or control of this outside agency or force. These may range from bodily experiences, attributed to electricity, to strangely developed mental experiences, attributed to hypnotism, electrical waves, or the operation of wireless or telepathy.

These phenomena are very common in schizophrenia.

DISTURBANCES OF THOUGHT.—Retardation (of thought), encountered mainly in depressive states, is characterised by slowness or difficulty in the process of thinking often accompanied by a poverty of ideas of which the patients are clearly Many depressive patients who are retarded do not, however, so much complain of slow thoughts or empty minds, as of thoughts that go round and round but do not get on. An extreme poverty of association may lead to a form of perseveration very like that seen in organic conditions.

Circumstantiality means slow progression of thought when due to a tendency to digress into trivial bypaths or irrelevancies. This type of thinking can often be found in epileptics, in morons, and in patients with organic diseases of the brain.

Flight of Ideas denotes a severe degree of the manic disturbance of thinking. Manic patients think quickly and have a great wealth of association; but these are superficial and often dictated by rhymes. Manic patients cannot pursue a consecutive line of thought of a purposive kind. Flight of ideas is an exaggeration of the method of thinking which Schopenhauer attributed to certain authors. "They write as if they were playing dominoes. The incidental number of the last piece determines the next, and the following piece has no relation to the last but one." An example of "flight of ideas" is provided by a manic patient who said "maternal, paternal, infernal, Dante."

Incoherence denotes the breaking up of the ordinary sequence or structure of thought into more or less unintelligible fragments. It is sometimes possible to discover why ideas with apparently no connection are associated with one another. The reasons for such associations differ from those that govern ordinary logical thinking. Incoherence occurs in schizophrenia, when it has a particular quality, and in confusional states, as after an anaesthetic. Normal people may experience something very similar in dreams.

Blocking, or a sudden interruption in the stream of thought, occurs in schizophrenia.

Neologisms are frequently invented by schizophrenics; much more than by psychiatrists. A schizophrenic patient; for instance, described a drawing: "Cordon. A theme of curved and fancy lines. steollic st, from steeple word from the point on the top of the post collic (unexplainable) word matching the point; caller from the cordron and cross-piece. Squirrel, wirrel, from wearl; the curls in the lines which look like a wearl pool."

Predominant Ideas are convictions not based on reason but on an emotional foundation. They are not necessarily pathological, and every normal person tends to develop them in the fields of politics, religion, and love.

The term "Paranoid" implies a resentful sense of a hostile environment coupled with a tendency towards the formation of delusions of a systematised character to explain it.

A Delusion is a false belief which cannot be corrected by an appeal to reason or logic. The education and environment must be taken into account in assessing whether a patient's ideas should be regarded as delusional or not. Primary (or autochthonous) delusions spring up suddenly with conviction but without previous warning, often in the setting of a peculiar tense emotional atmosphere. They are characteristic of early

schizophrenia. Thus a schizophrenic became suddenly certain that the firing of cannon in Hyde Park to celebrate the King's birthday really foretold the end of the world...

Many delusions are secondary to hallucinations, but they can occasionally develop from a real event or experience as the result of systematic although emotionally biassed reasoning.

Delusions are usually classified as delusions of grandeur, of self-reproach, of poverty, of reference, of persecution, or as hypochondriacal delusions, according to their content.

Some schools of psychology try to explain the origin of delusional ideas by invoking various psychological mechanisms. Delusions of grandeur, for example, are said to result from over-compensation to feelings of inadequacy, insecurity, or inferiority. Self-reproach is explained as incomplete or unsuccessful repression which leaves the feeling of guilt behind. Again, persecutory or paranoid ideas are said by some psychiatrists to represent the projection of repressed homosexual tendencies. The majority of psychiatrists would, however, regard this last explanation as too restricted, and would hold that any undesirable tendency or quality which could not consciously be endured by the individual may be projected and result in a delusion of persecution.

The recognition of such mental mechanisms as have just been described can be of value as indicating how a particular case should be approached; but only when there is reasonable reason to suppose that they do apply. The danger in using set formulae is, firstly, that they may prevent the investigator from elucidating the really significant psychological sequence in an individual case; and secondly, that the explanation provides a mere description in other terms and not particularly helpful terms either. Thus, for example, it can frequently be observed that a variety of different delusions may be equally well understood by invoking the same mechanism, which limits its value as an explanation of any particular delusion. For instance, although hypochondriasis may be explained as representing the flight from environmental or personal difficulties into illness, yet this explanation is too general, and does not account for the transition from a mere preoccupation with the bodily functions to definite delusional formation, such as that the bowels are blocked or that the

organs are rotting away, or that the brain is liquefying, or that the body is dead (nihilistic ideas).

Obsessional Ideas (compulsive thoughts) must be distinguished from delusions and from predominant ideas. Compulsive thoughts are recognised as being abnormal and foreign to the personality, and are resented and resisted. The patient struggles against an obsessional idea, but fights for his delusions, and accepts or revels in his predominant preoccupation. In content obsessional themselves the content obsessional themselves. In content, obsessional thoughts are often banal and pointless, but sometimes indecent, blasphemous, or aggressive formulations may be expressed.

DISTURBANCES OF AFFECT (OR EMOTION).—Temperament refers to the characteristic phenomena of an individual's emotional nature, including his susceptibility to emotional stimulation, his customary speed of response, the quality of his prevailing mood, and all peculiarities of fluctuation and intensity in mood; these phenomena being regarded as dependent upon constitutional make-up, and therefore largely hereditary in origin. Disturbances of affect (or emotion) may consist of variations in intensity or duration, or the emotional response may be abnormal because it is inappropriate in the particular situation. Some of the emotions met with in psychotic patients are of a kind either unknown in normal individuals, or only experienced by them in very special circumstances.

Intensity.—Some patients show an increase in the intensity of their emotions at the beginning of an acute psychosis. Complaints of poverty or loss of emotion (affective loss) are, however, much more common and can be extremely distressing. This is seen in depression and early schizophrenia. In depressive states, patients often complain of loss (or diminution) of all feelings, or of the normal feeling tone with their sensory experiences. Again, certain quite normal individuals are acutely aware of complete emotional detachment after a psychic shock, such as seeing an accident. This is usually a transient experience of no significance. Shallowness of affect is frequently seen in imbeciles, schizophrenics and in dements. In so-called moral insanity (moral imbecility) the social sense is poorly developed or apparently missing.

Incapacity to control the emotions and their expression is

characteristic of organic syndromes (emotional incontinence

and lability). Normal emotional experiences, such as elation, depression, irritability, anxiety, may become morbid by reason of their intensity and duration, but the extreme degrees of melancholy and panic are never experienced by the normal individual. Ecstasy may be described as a feeling of overwhelming bliss combined with an all-pervading sense of clearness of perception. It is often associated with a feeling of suspicion and fear, and not infrequently accompanied or followed by the appearance of autochthonous delusions. True ecstasy is probably beyond the experience or the imagination of normal persons. States of ecstasy are seen chiefly in schizophrenia.

Incongruity of Affect.—This is also a frequent symptom of schizophrenia. By incongruity of affect is meant, for example, that the patient may refer with indifference to the most horrible experiences, or even jest about them.

Ambivalence denotes the simultaneous existence of contradictory emotions, also frequently observed in schizophrenics.

DISTURBANCES OF MEMORY.—The function of remembering is generally divided into (a) Registration; (b) Retention; (c) Recall.

- (a) Registration.—Registration of the material to be remembered may be disturbed by lack of concentration. Thus, in manic states, the distractibility of attention prevents the patient from perceiving properly what is happening. The manic patient will therefore tend only to remember subsequently those things that by chance or because of their special impressiveness did not escape his attention. Depressive preoccupation may also lead to faulty registration. In states of unconsciousness nothing can be recorded, hence the subsequent amnesia. When consciousness is dimmed or clouded, registration is incomplete, and therefore only a partial or patchy recollection of what has taken place remains. This may extend even to a complete amnesia if registration was sufficiently deficient.
- (b) Retention.—Disturbances of retention should only be assumed if it is certain that registration and recall are unaffected. Retention for short or longer periods of time (the latter being essential for learning) may be disturbed to a different degree. The capacity for retaining visual and auditory material may also differ markedly. In general, the

capacity to retain material is better if associations are present with which it can easily be connected. Poverty and slowness of association may simulate a memory disturbance.

(c) Recall.—Recall may be either automatic or voluntary. In morbid mental conditions automatic recall is often preserved whilst the capacity for voluntary recall (i.e. involving conscious effort) is frequently impaired. These phenomena can often be observed in normal individuals who are fatigued, or in the aged, and the disturbance is most marked in trying to recall names. It is generally possible for a person to recognise something immediately which he could not recall on voluntary effort, or only to be able to recall facts when something associated with them is recollected. Voluntary effort quite often seems to interfere with recollection. This fact, which is known to everybody by self-observation, may be a prominent feature in the Korsakoff psychosis. Thus, such patients may be unable to recall things when asked to do so directly, but recall them readily if the problem is approached indirectly. The ability to recall is facilitated by richness and rapidity

The ability to recall is facilitated by richness and rapidity of association: consequently poverty or slowness of association may make memory disturbances appear more severe than they really are. All disturbances of recall cannot, however, be explained as being due to loss of initiative or poverty of association. Nor should all memory disturbances be attributed to "repression," although this may play an important part in determining which material is forgotten, or rather which material cannot be recollected.

When memory impairment is due to organic brain disease, this is usually shown in memory for recent events rather than for remote ones. The gaps of memory, or amnesia, consequent upon sudden damage to the brain (head injuries, epileptic fits, apoplexies) are often for a longer period than that of the actual unconsciousness. This is frequently seen in retrograde amnesia after injury to the brain, as when an individual cannot remember the accident, or the events for a variable length of time preceding it. The amnesia for the period of unconsciousness, or of disturbed consciousness, is due to lack of registration. Anterograde amnesia (that is loss of memory for a period after consciousness has apparently been regained) is due to a state of altered consciousness during the period which the patients do not remember afterwards.

Loss of memory, not due to organic causes, can be of two main types. The term fugue is commonly used when a patient wanders off in a condition of disturbed consciousness, and usually occurs as the culmination of a period of emotional tension or mental disturbance. It may thus be observed in both affective and schizophrenic syndromes and a history of symptoms preceding the onset can be obtained. Fugues as described above must be distinguished from retrospective amnesias, usually hysterical in origin, in which there is evidence that the patient knew perfectly well what he was doing when he did it, although he subsequently claims, with varying degrees of genuineness, that he has no memory of it.

In fugues, the subsequent loss of memory is usually patchy. Total loss of memory over a long period, or over the whole of life, is generally a hysterical symptom, and inconsistencies between the knowledge which the patient shows and that which he claims to have forgotten may demonstrate that the repressed material is very near the surface of consciousness: in other words, deliberate deceit, or a tendency in this direction, plays an active part.

A normal quality of remembering is that it tends to mould the past according to desire, and to fill in defects in memory with facts which may have been there rather than with facts which are genuinely recollected; and the conviction that such false recollection carries is often very striking. When there is a pathological loss of memory, the gap is often filled in with the most elaborate fabrications. Broadly speaking, the less critical the patient, and the more active his initiative, the more capable he becomes of producing such fabrications, and of changing them under cross-examination. This is often strikingly demonstrated in the Korsakoff psychosis.

The feeling of familiarity which is experienced on recognition may also, in certain abnormal conditions, be attached to facts or things that have not previously been known to the individual. This experience of "déjà vu" is known to many normal persons when fatigued or sleepy, and it may be a prominent feature in certain neurotic syndromes.

In the Korsakoff psychosis patients not infrequently get the order of past events wrong, so that the disturbance is not so much a disturbance of correct fact as of correct sequence.

The problem of time perception and its disturbances is still

very obscure. Some patients complain that time moves too fast or too slowly, or in extreme cases that it seems to stand still, or rushes on so fast that they cannot follow.

DISTURBANCES OF INTELLIGENCE.—Intelligence varies not

only as regards general ability but also as regards special gifts and aptitudes. Tests for intelligence can only sample relatively few aspects and therefore a general conclusion should never be based on the results of a single test. In addition to the general level and particular type of intelligence, it is important to bear in mind that various and more or less transient factors may interfere with an individual's capacity to use his intellectual ability, so that there may be a failure in intellectual efficiency but not in the intellectual level itself. It is perhaps desirable to use the general term of intellectual impairment so long as it cannot be decided whether the disturbance is recoverable or not and to restrict the use of the term dementia for those cases of acquired intellectual disturbance of a permanent character. A moderate degree may be evident only in an inability to adapt to new problems and situations whilst the capacity to cope with ordinary activities and familiar tasks is still preserved. A more severe degree of dementia interferes with the adjustment to the ordinary activities of everyday life. As regards intellectual performances, creative thinking suffers first, abstract reasoning next, until finally primitive tasks such as the definition of words or the finding of opposites or common qualities become impossible. lower the original intellectual level, the more difficult it becomes to determine mild intellectual impairment. attempting to do this it is always necessary to try to assess the patient's previous level from his past history—his school career, his occupational training, his work record. Tests for intellectual deterioration are based on the fact that a patient's vocabulary and general knowledge give a fair idea of his intellectual and educational level, and that this indicator is relatively resistant to mental deterioration.

As regards intelligence tests in general, the student is apt to oscillate between an unjustified scepticism as to whether they have any value at all, and an uncritical over-valuation of the findings, partly because they are expressed in a numerical form. He should always be aware of the danger of falling into the possible fallacy of supposing what can be measured is what is wanted; and should always bear in mind three questions: What is being measured by the test? How does the result relate to what he wants to know? What does he want to know?

Test results have no mystical merit in themselves and should always be checked, or as the psychologists say "validated" against some objective criticism. In industrial psychology, for example, their main merit lies in their predictive value for success in passing an examination for a job or for success in the job itself. Now clearly, unless agreement can be reached as to what is the type of man that is wanted in a job, this cannot be predicted; and unless the job involves an output that can be measured, efficiency in its performance must be a matter of subjective judgment, which can differ widely. Finally, what can be measured by intelligence tests is only one aspect or attribute of the individual; being dependable and a good mixer is often more important than being bright.

These words of warning are issued not to throw doubt upon the value of intelligence tests, but in order to suggest their limitations; a point that is sometimes lost sight of owing to the magic of numbers. Nor is this word of warning perhaps out of place when interpreting other tests of the laboratory type for clinical purposes in general medicine.

DISTURBANCES OF SENSATION. — Hallucinations. — These may be defined as sensory perceptions (mental impressions of sensory vividness) without objective stimulus. An example would be seeing a pink elephant when no pink elephant was present. Illusions are real perceptions falsified, an example being to mistake a dark stain on a pillow for a bed bug. These definitions may be accepted for practical purposes, but it should be borne in mind that normal sensory perception is far from being an objective picture of reality, but is conditioned and modified by many personal factors, both sensory and extra-sensory. In other words, there is always a personal contribution to a perceptual situation, but the amount of this personal contribution varies enormously. This holds true for illusions and hallucinations as well as for normal perceptions.

Some anomalies of sensation may be mentioned that should be separated from hallucinations and illusions in the stricter sense. Thus distortions of visual impressions, owing to detachment of the retina, noises in the ear or sensations of abnormal movements due to lesions of the auditory or labyrinthine apparatus, numbness or tingling in the extremities due to pressure on the peripheral nerves, all being disturbances of the apparatus of sensation, are better kept apart. The same applies to flashes of light, if produced by stimulation of the optic nerve, or the more complex subjective experiences produced by stimulation of the sensory areas of the cortex or cerebral pathways. Distortions of space, or distortions of objects in space, may be experienced in toxic conditions, in diseases affecting the visual centres, and in certain schizophrenic states. Anomalies in the time-component of perception are described as speeding-up or slowing down of sensations, or irregularity of movements perceived.

Visual hallucinations are most commonly found in states of impaired consciousness (delirium and twilight states), and should always suggest the predominance of an aetiological cause of an organic type. Some normal individuals, however. experience visual hallucinations just before they go off to sleep (hypnogogic hallucinations). Epileptics in twilight states often complain of seeing red colours or fire, but their visual experiences may be more elaborate. Migrainous attacks frequently start with sensations of coloured spots, fortification figures, or, rarely, more complex visions. Visual hallucinations in toxic and delirious reactions may range from kaleidoscopic patterns, which appear when the eyes are shut, to the most complex visions of scenes, persons, animals, and objects, either still or moving at various speeds. The impression may be vague, or very clear and detailed. The hallucinated objects may be projected in a real setting, i.e. a man may be seen sitting in a real chair, but may be transparent and uninfluenced by any physical happenings around him. Schizophrenics may experience symbolic visions, often possessing a quality of intense significance; but visual hallucinations in schizophrenic conditions are more usually in the nature of vivid mental pictures rather than experiences which are thought to be part and parcel of the external world, and, except in acute phases or episodes, are rare.

Auditory Hallucinations.—These are most common in schizophrenic states, but also occur in toxic confusional conditions and involutional melancholia. They are usually

localised in the head, but may appear to come from outside. Less frequently they are located in some part of the body; this is very typical of schizophrenia. They usually occur in the form of voices of varying distinctness, and even when the exact words are not clearly heard, the general import is often felt to be plain. Sometimes the schizophrenic patient recognises them as his own thoughts, made audible to him simultaneously, or anticipating or repeating what he is thinking. Noises, such as creaking, shooting, ringing, and so on, may also be heard. Auditory hallucinations often have an illusional foundation.

Tactile Hallucinations.—Tactile hallucinations are described by schizophrenic and delirious patients. The patient may feel he is being touched, tickled, pricked or blown upon, or they may take the form of a drizzling sensation of sand or dust. The genital organs are often the seat of tactile hallucinations, which may be elaborated into a belief that the patient has been the victim of rape. Some schizophrenic patients feel that their body, or parts of it, has changed in size or weight. Statements about a change in the internal organs, such as that the heart has become a stone, or that the bowels are blocked, may be metaphorical expressions, but are sometimes accepted later as statements of fact, and, in so far as this is the case, become delusions.

Olfactory Hallucinations.—Olfactory hallucinations, which usually seem to have an unpleasant character, are frequently complained of by schizophrenics, less frequently by involutional melancholics, and occasionally by delirious patients.

The clarity or sensory vividness of the experience is less important than that of being a recipient rather than the producer of it. Thus an hallucination can have the quality of intense reality as a personal experience, not of subjective origin, and yet be ill-defined and vague; whilst a number of individuals with a vivid auditory imagery may hear with almost sensory vividness words which they clearly recognise to be their own thoughts. The perceptual character of hallucinations, or the conviction that they represent something originating from the material external world, varies from case to case. Zucker has made experiments by trying to imitate a particular hallucination to see whether the patient could distinguish between their hallucination and the real perception of the attempted imitation. He found that, with

the exception of certain toxic and delirious conditions, they could distinguish between the two quite readily. Hallucinations appear to be more obtrusive in character than perceptions, and tend to occupy the foreground of the patient's mind, and to absorb his attention. Otherwise the fact that patients are unable to disregard voices and other sensations that are practically meaningless could not be explained.

The content of the hallucinations is determined to a varying

The content of the hallucinations is determined to a varying extent by the past history of the patient concerned. Elementary hallucinations are more easily explained on a neurological level, but more complex hallucinations of visions and voices can often be traced, as regards content, to the previous experiences, attitude, views and fantasies of the particular patient. It is sometimes possible to distinguish the physiological from the psychological element in their production. Thus, delirium tremens patients usually see small and moving objects, like a scotoma. Their elaboration into rats, mice, or something else depends upon personality factors. Similarly, more complex hallucinations of cocaine addicts (cocaine bugs under the skin) are built around the nucleus of their tactile sensations. In other instances it is not easy to discover a sensory element in the development of hallucinatory experiences, or any illusional basis, and it may be preferable to interpret these experiences in the same way as dreams; but no analysis of a biographical type can explain the fact that hallucinations occur at all. In order to explain this it is necessary to introduce factors that are not of a psychological type.

Depersonalisation is "a state in which the individual feels himself changed throughout in comparison with his former state. This change extends to both the patient and the outer world and leads to the individual not acknowledging himself as a personality. His actions seem to him automatic; he observes his own actions like a spectator. The outer world seems strange to him, and has lost its character and reality" (Paul Schilder).

The sense of the outer world being changed is sometimes known as derealisation, as opposed to the feeling that the patient is himself changed, which constitutes depersonalisation in the more strict sense. There are transitional states between the disturbance of feeling tone characteristic of depersonalisation and "affective loss" (see pp. 37 and 167).

# PSYCHIATRIC CLASSIFICATION AND DIAGNOSIS

Kraepelin founded what is often called the clinical school of psychiatry. He and his followers attempted to classify mental disorders, in analogy with the methods employed in general medicine, into disease entities, characterised by a common aetiology, pathology, course and outcome.

The last two or three decades have, however, brought about a change of outlook both in general medicine as well as in psychiatry. The sick person as a whole has become the centre of interest. Disease is no longer regarded as an abstract evil or entity that may possess a man; it has come to be regarded as the reaction of the individual to noxious agents and environmental stresses.

Consequently, as Adolf Meyer was amongst the first to point out, the problem of mental disorder is not exhausted by the attempted erection of categories of "disease entities" into which patients can be pigeon-holed from a diagnostic point of view.

The question to be asked about a psychiatric patient is not, therefore, "What kind of mental disease has this patient got?" but rather, "What type of reaction does this *individual* show?"

In modern psychiatry, therefore, the older conception of rather rigid and clearly defined "disease entities" has been replaced by the broader and more elastic conception of "reaction types" or "psychiatric syndromes"; for, although an infinite number of individual varieties must be recognised, certain broad patterns of morbid response can be discerned.

A syndrome is a complex of symptoms that tend frequently to be found in association.

Thus, catatonic symptoms are not evidence of a disease "catatonia," but are symptoms that may, for example, be seen in organic types of reaction, and also, much more frequently, in schizophrenic types of reaction.

There is often considerable overlapping of the various syndromes, so that one or more symptoms may be common to several types of mental disease.

Most clinical pictures encountered fit into one of the following reaction types:—

(1) The Organic Reaction Type.—The main features are disturbances of consciousness, of memory and of intelligence. Organic factors are of predominant importance in the production of this type of reaction, which may be subdivided

into clouded consciousness, delirium, Korsakoff syndrome, hallucinosis and twilight states, and dementia.

The various organic causes which may result in the development of these subdivisions of the main organic reaction type will be discussed later.

- (2) The Schizophrenic Reaction Type.—The main features are progressive introversion, splitting of personality, and paranoid symptoms. The meaning of these terms will be discussed later. This reaction type occurs mainly as the result of the operation of constitutional factors, and may be subdivided into (1) simple—hebephrenic, (2) catatonic, and (3) paranoid—paraphrenic varieties
- (3) The Affective Reaction Type.—The main features are swings of mood, or abnormal mental and physical reactions to emotions, or both combined.

Constitutional or psychological factors, or both, are usually predominant in the production of this reaction type, which may be divided into manic and depressive states and anxiety states.

- (4) The Hysterical Reaction Type.—This is characterised by mental and physical symptoms, not of organic kind, produced and maintained by motives, never fully conscious, directed at some real or fancied gain to be derived from the illness.
- "Organ neuroses" may be affective or hysterical in origin. They commonly start as anxiety reactions, which then become utilised for hysterical (escape) purposes.
- (5) The Obsessive-Compulsive Reaction Type.—This is characterised by mental symptoms—thoughts, actions, feelings—which force themselves upon a patient's mind against his desire and into the abnormality of which he has insight.
- (6) The Psychopathic Reaction Type.—This is less well defined than the preceding types and comprises the episodic "short circuit" reactions, to be described later, which are frequently seen in psychopathic personalities.

These syndromes are not mutually exclusive. The student may be helped by the following diagrams (Fig. 3). Suppose that the organic type of reaction is represented by a circle (A), the schizophrenic by another circle (B), and the affective by a third circle (C). These circles should not be considered as quite separate from one another as in Diagram I, but rather as overlapping as in Diagram II.

Individual cases can then be represented as at any point

within the system of circles. For example, A1 would represent an organic type of reaction in almost pure culture; A2 as predominantly an organic type of reaction, but with some affective admixture, or as it is usually expressed "some

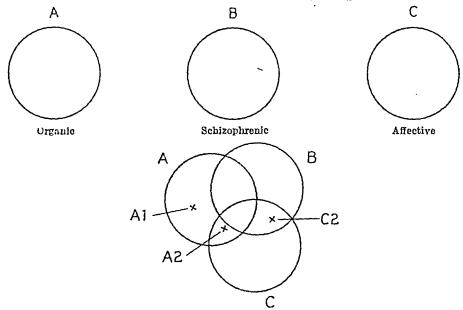


Fig. 3.—Relationship of various Syndromes.

affective features"; C2 is a mixed affective and schizophrenic picture; and so on in various combinations and proportions.

The same principle holds good for the various subdivisions

within the main groups. Thus it is not uncommon to meet with cases that can most conveniently be described as depressive states with anxiety features and so on.

Psychiatric diagnosis (or classification) is not, however, exhausted by describing a clinical picture in terms of a syndrome or reaction type.

The reader will have observed that, in the definition of the various reaction types, reference to their aetiology was not entirely omitted. There is, in fact, a certain affinity between the nature of the cause and the type of reaction that ensues. This relationship is closest between physical or organic causes and the organic reaction type. But hysterical reactions have a close relationship to specific psychological factors and the psychopathic reactions to a particular type of constitution.

When attempting to make a more complete psychiatric diagnosis, (1) the aetiological should be distinguished from

(2) the descriptive aspect. The latter consists of the syndrome or reaction type that is observed. The aetiological aspect comprises the assessment of the physical, psychological and constitutional factors and their relative importance in bringing about the reaction in question.

(3) Previous Personality.—No reaction can be fully understood without taking into account the reacting personality as seen in the light of his past history and environment. Therefore, a complete psychiatric diagnosis should include the essential characteristics of the patient's premorbid personality.

(4) Prognosis.—The practical value of any diagnosis lies in its prognostic implications. The syndromes as such have little prognostic significance. Therefore, the expected course of the reaction, assessed in the light of clinical experience, after taking into account the clinical picture, aetiology and personality of the patient, should also be indicated.

An example of a diagnostic formulation that would satisfy all these criteria might be:

"Acute (recoverable) affective state, reactive to terrifying battle experiences, in an immature, ill-adjusted personality of low intelligence," or

"Progressive organic reaction, due to chronic alcoholism and malnutrition, in a hypomanic personality of the faux bon homme type."

It is, of course, possible, and it may be desirable, to go into more detail, in particular by weighing the various aetiological factors and by assessing their importance in either bringing about the reaction or in colouring the clinical picture. For example, a case might be diagnosed as follows:

"A transient affective reaction to separation from home coloured by a schizophrenic heredity (constitution) in a dependent sensitive youth," or

"Progressive presentle organic reaction coloured by alcoholism in a retired general with a highly aggressive premorbid personality."

Diagnoses of the above kind are sometimes called "multi-dimensional."

Classifications are inventions and not discoveries; and the student can save himself a good deal of puzzlement about individual cases if he realises that (a psychiatric diagnosis is essentially a short-hand description)

## CHAPTER IV

### PSYCHIATRIC CASE-TAKING

T is just as important in psychiatry as in general medicine to have a scheme of examination; for unless a systematic scheme of examination is followed, important points and problems may easily be missed.

It must, however, be remembered that in psychiatry a good deal of elasticity is necessary in following such a scheme, for it is essential to establish and maintain a satisfactory contact (rapport) with the patient. Unless this can be achieved, the picture obtained will be incomplete and misleading.

The Examination of the Patient.—The specific psychiatric method of examination is the interview. This will include a few preliminary informal mental tests, which it may be necessary to supplement later by more formal standardised mental tests that are often delegated to a trained (non-medical) psychologist or technical assistant.

It is always essential to perform a thorough physical examination, special attention being paid to the examination of the central nervous system; and even when this has been previously carried out by a general physician, it is well to do it again. Not only may certain points require further elucidation as the result of the additional information forthcoming during the interview, but patients are rightly reluctant to believe that their examiner is a proper doctor unless he examines them physically as well as mentally.

Additional Information.—It is of fundamental importance to supplement the information obtained from the patient by enquiries from other sources such as relations, friends and employers. The psychiatrist has to deal with many patients who, by the very nature of their illness, are unco-operative or unreliable. The most willing patients are liable to distort facts as the result of their emotional state even when they are not filled with distrust regarding the purposes of the examination or its outcome; and a substantial number of psychiatric patients are filled with distrust as regards these points.

Thus, to take two extreme examples, patients on a criminal charge, who are pleading their abnormal mental condition as a defence, tend to remember numerous neurotic traits in their past life as well as a large number of mentally afflicted relatives; whereas applicants for pensions on the grounds of neurotic disability, tend to forget previous breakdowns and any psychopathic inheritance.

The critical sifting of objective evidence obtained from external sources is therefore indispensable; and knowledge of the position and history as it appears to others as well as to the patient may also save the psychiatrist a good deal of time. A psychiatric axiom is therefore: (Whenever possible see relations or friends separately and supplement the facts obtained from the patient from as many sources as possible. Much of the relevant information can and should be obtained before the patient is seen.

The help of a trained psychiatric social worker in collecting the necessary data is invaluable; and naturally the general practitioner starts with a tremendous initial advantage over the professional psychiatrist since he is able to know the domestic and social situation at first hand.

The Interview.—The purpose of the psychiatric interview is threefold; to obtain a picture of the patient's psychological condition; to collect the data of his biography which enables the physician to understand the development of the present condition; and to create or maintain a relationship between the physician and the patient, encouraging the acceptance by the patient of the physician's advice. The scheme given below should be considered a scheme of reference into which to arrange the facts collected. It is not necessary, and often not desirable, to gather the information in the sequence outlined below; in other words, a psychiatric interview cannot be substituted by a set of standard questions or a questionnaire. Every exchange of question and answer serves all three purposes and it is only in retrospect that the physician can disentangle facts, attitudes and their interaction.

The establishment of the right atmosphere must be kept in mind from the beginning to the end of the interview. The general physician generally starts with an advantage. The patient seeks his advice and is willing to accept his authority and help. Although the same is true of many patients in psychiatric practice, a considerable proportion of psychiatric patients will be suspicious, unwilling or reluctant to accept advice. It is this group which requires much patience and skill on the part of the physician to establish at least a working relationship, and it is in this group that advance information is of the greatest value. On the other hand, this type of patient may object to the physician listening to relatives "behind his back," and it is sometimes preferable to forego the advantage of seeing the relative first for the sake of securing the patient's confidence.

Whereas in a business interview the first contact is often established by a short conversation on the weather or another neutral subject, the rapport between patient and doctor is based on the latter's interest in the patient's complaints. In a psychiatric interview it always repays to spend some time on the patient's description of his symptoms. This serves to show the doctor's interest and at the same time it provides the "phenomenology," i.e. the introspective account which is an essential part of the patient's mental state, indispensable for the diagnosis.

The two main faults which the student must try to avoid are (1) asking leading questions, and (2) moralising. He will find this very difficult. It is almost irresistible to put questions in such a way as to suggest the answer (e.g. you didn't? it wasn't?) and this fault is often combined with a manner of delivery or facial expression which leaves little doubt in the patient's mind not only as to what answer is expected, but as to what reception a different answer would receive. The reticent or allegedly unco-operative patient is often the product of a poor examination technique; for most patients are surprisingly willing to discuss even their most intimate problems if given a little encouragement and many are grateful for the opportunity. But any rapport that may have been established naturally tends to be broken by such a remark as: "You don't mean to say that a great big chap like you is afraid of the dark?" Moreover, a poor examination technique can easily result in inaccurate as well as inadequate information, Finally, it is permissible to laugh with a patient but never at him.

Main Topics in Psychiatric Case-taking.—The main difference

from ordinary case-taking consists in an attempt to cover a wider range. What follows may seem rather formidable; but the student would be wise to begin by taking a full history and only to indulge in short cuts when he has had a fair amount of experience and practice; otherwise his short cut may be to the wrong shop.

The following items are suggested: Name, age, sex: Civil status (e.g. single, married): Occupation: Addresses of patient and also of his relations, employers, etc. Telephone numbers.

Details of complaint and date of onset. ("When were you last in your normal health?"). Careful chronological history of present illness. Coincidence with external stresses may be noted but should not be emphasised until later. Independent accounts are important and, as previously pointed out, friends and relations should be seen first and separately.

Family History.—Obtain the occupation of the father and, if possible, of other relations as well. This is a good indication of the social and cultural background. Determine the place of the patient in the family and the number of siblings (i.e. brothers and sisters). Do not start off by asking whether there is insanity or suicide in the family. Inquire not merely for nervous and mental illnesses (including epilepsy and alcoholism) but also for physical ill-health; and preferably make this inquiry first so as to reduce alarm. Apart from major mental illness, inquire also for minor mental abnormalities ("nervous," highly strung) with special reference as to how these phenomena may have actually interfered with happiness or efficiency. Try to determine the home atmosphere (was it happy? what sort of people were the parents?) and "health conscience," i.e. was it customary for the family to take minor ailments seriously, to enjoy ill-health and always to retire to bed with a cold.

Apart from the possible genetic implications, (the family history and background is of immense importance as indicating the early environment.)

Personal History.—The importance of different epochs of life and development will obviously vary considerably with the age of the patient; neurotic traits in childhood will obviously possess less significance in a senile patient than in an adolescent.

Ristory of Early Development.—Birth injuries: dates of

walking and talking: neurotic traits such as finickiness over food, thumb sucking, fear of the dark, stuttering, nail biting, enuresis, sleep-walking and nightmares. Sleeping arrangements.

School Record.—Apart from scholastic attainments notes should be taken of how school life was enjoyed, keenness on games, disciplinary difficulties and homesickness.

Work Record.—Jobs held, why taken on, how long held,

reasons for leaving and pay received.

Health Record.—Previous physical illnesses and minor physical ill-health, mental ill-health or nerve trouble, attitude towards health matters and bodily disturbances, use and abuse of medicine and drugs, fads and physical culture notions,

output of physical energy, fatiguability.

Social and Sex.—Sex development and information, masturbation, sex experiences, menstruation, marriage, pregnancies, contraceptive measures, menopause.

(Do not, for example, ask an unmarried girl if she has no boy friends, but rather whether she has any special boy friends).

Attitude towards relations, friends and "company," sociability and social contacts, religious and political tendencies and views: successes and disappointments: quarrels: contacts with the law and authority: tendency to lie or steal: hobbies, interests and ambitions: how spare time is employed:

what makes life worth living.

Personality Traits.—Actions or attitudes indicating that, for example, the patient tended to show a reaction of fight in an actually or potentially dangerous or difficult situation, trying to face or overcome the danger or difficulty, or a reaction of flight tending to avoid or to run away from it; self-confidence or self-assurance in social relationships as self-confidence or self-assurance in social relationships as opposed to shyness or timidity; courage when faced with physical danger or the reverse; initiative or to be lacking in initiative; exercises his own will or judgment or tending to rely for support and guidance on authority; showing a resistance to attempts on the part of others to change his activities or ideas and hence hard to influence, or easily influenced; preferring the stimulus and challenge of the new and unfamiliar or preferring old and familiar ways; to be quick in his reactions or slow; to be adventurous, welcoming the hazardous and exciting, or tending to be cautious and to count the risk and cost; to be aggressive or retiring socially; preferring to dominate others or to subordinate himself to others; to be suspicious or frank; moody or equable, warmhearted or cold; conscientious or slap-dash; interested in the abstract or the concrete; ethically minded or not overscrupulous; tending to judge affairs by his own individual standards or to prefer conventional standards; to be creative and original or imitative. (The list could be extended indefinitely, but it is high time to call a halt. People are relatively seldom all of a piece and consistent; logical contradictions in attributes may often be observed and should not cause surprise.)

Mental Status.—(1) Appearance and Behaviour.—Report facial and bodily expression, condition of hair and clothing; postures, gestures, tics, grimaces. Fear, restlessness, agitation,

spontaneity in speech and action.

- (2) Talk.—The form of the patient's utterances rather than their content is here considered. Does he say much or little, talk spontaneously or only in answer, slow or fast, hesitantly or promptly, to the point or beside it, coherently, discursively, loosely, with interruptions, sudden silences, changes of topic, comments on happenings and things at hand, appropriately, using strange words or syntax, puns? How does the form of his talk vary with its subject?
- (3) Mood.—The patient's appearance may be described, so far as it is indicative of his mood. His answers to "How do you feel in yourself?" "What is your mood?" "How about your spirits?" or some similar inquiry should be recorded. Many varieties of mood may be present—not merely happiness or sadness, but such states as irritability, suspicion, fear, unreality, worry, restlessness, bewilderment, indifference, and many more which it is convenient to include under this heading.

Observe the constancy of the mood, the influences which change it; the appropriateness of the patient's apparent emotional state to what he says.

(4) Delusions and Misinterpretations.—What is the patient's attitude to the various people and things in his environment? Does he misinterpret what happens, give it special or false meaning, or is he doubtful about it? Does he think anyone pays special attention to him, treats him in a special way,

persecutes him or influences him bodily or mentally, in ordinary or scientific or supernatural ways? laughs at him? shuns him? admires him? tries to kill, harm, annoy him? Does he depreciate himself in any way, his morals, possessions, health? Has he grandiose beliefs?

- (5) Hallucinations and other Disorders of Perception.—The source, vividness, reality, manner of reception, content and all other circumstances of the experiences are important; its content, especially if auditory or visual, must be reported in detail. When do these experiences occur, at night, when falling asleep, when alone? What is the patient's own explanation? Any peculiar bodily sensations; feelings of deadness?
- (6) Compulsive Phenomena.—Obsessional thoughts, inclinations or acts. Are they felt to be from without or part of the patient's own mind? Relation to his emotional state: does he repeat actions unnecessarily, such as washing, to reassure himself? Phobias and anxiety.
- (7) Orientation.—Record the patient's answers to questions about his own name and identity, the place where he is, the time of day and the date.
- (8) Memory.—This may be tested by comparing the patient's account of his life with that given by others, or examining his account for intrinsic evidence of gaps or inconsistencies. There should be special inquiry for recent events, such as those of his admission to hospital and happenings in the ward since, or his journey to hospital or consultingroom. Selective impairment of memory for special incidents, periods, recent or remote happenings.

Record the patient's successes or failure in grasping, retaining, and being able to recall spontaneously or on demand, three or five minutes later, a number, a name and address, or other data. Give the patient a short story to read and ask him to repeat it in his own words. Give him digits forwards and then backwards, and record how many he can repeat immediately after being told them. A normal person should be able to repeat at least seven forwards and five backwards.

- (9) Concentration.—Subtraction of serial sevens from a hundred (give answers and time taken). Telling the months of the year forwards and backwards.
  - (10) Grasp of General Information.—Tests for general

information and grasp, as well as for ability to calculate, should be varied according to the patient's educational level, and his experiences and interest. Suitable subjects are:—

Name of the King, and his immediate predecessors.

The Prime Minister.

Capitals of France, Germany, Italy, Spain, Scotland. Six large cities in Britain.

Date of beginning and end of the last War and of the first World War.

These tests are not intended so much to estimate general intelligence as to see whether there has been any falling away from the patient's former presumptive level or knowledge and capacity, which has to be estimated from his life history and independent information.

(11) Rough Intelligence Tests.—Suitable questions for a rough estimate of a patient's intelligence are:—Definitions of abstract words, e.g. "What is envy? Surprise?" or explanations of proverbs, e.g. "The early bird catches the worm," or differences, e.g. dwarf and child, idleness and laziness, or simple problems in arithmetical reasoning.

A simple story may be told in order to test whether the patient grasps its point.

Specimen Story.—The Donkey Loaded with Salt.—A donkey, loaded with salt, had to wade a stream. He fell down, and for a few minutes lay comfortably in the cool water. When he got up he felt relieved of a great part of his burden, because the salt had melted in the water. Longears noted this advantage, and at once applied it the following day, when, loaded with sponges, he again went through the same stream.

This time he fell purposely, but was grossly deceived. The sponges had soaked up the water, and were considerably heavier than before. The burden was so great that he succumbed.

The same remedy does not apply to all cases.

(12) "Insight."—This is best obtained by the questions as to whether the patient regards himself as being ill; what he regards as being the nature of his illness (whether physical or "nervous" or both) and whether he thinks he will get well.

(13) More Formal Intelligence Tests.—A large number of

intelligence tests have been devised, but the Binet-Simon is still the most widely used for clinical purposes. The Binet has stood the test of time, it is well standardised, and it has, moreover, the great advantage of being well known and recognised in educational and legal circles. The student must at least be familiar with its main principles and methods of scoring. The Binet should be used in the form as revised by Terman and Merrill in 1937.

The great success of the Binet is due to the employment of a large number of sub-tests which sample most kinds of abilities, so that a fair average is obtained which is not unduly biassed by success or failure in some special ability or aptitude. A number (4-6) of these sub-tests are allotted first to each half-year and later to each complete year of life between the ages of two and fourteen. The tests are so standardised that the average child passes the items corresponding to his age. The subject is allotted a mental age (M.A.) corresponding to the chronological age (C.A.) of the average child scoring his performance. Age differences between different subjects are eliminated by the simple device of dividing the M.A. by the C.A. and multiplying by 100. This gives the intelligent quotient (I.Q.). An I.Q. between 90 and 110 should be regarded as normal.

Thus if a 10-year-old child achieves a mental age of 13 years the I.Q.=(13/10)×100=130. Similarly, if a child of 12 years 4 months achieves a mental age of 9 years 6 months then the I.Q.=114 months divided by 148 months×100=77. In the case of the 1937 Terman-Merrill revision certain adjustments are made which alter the simple relationship; tables are provided from which the I.Q. is read off directly, given the C.A. and M.A. In earlier revisions it was usual to assume a cessation of mental growth either at 14 or 16 years and use one of these figures as a constant divisor for persons over these ages. In the new revision all adjustments are provided automatically in the tables.

The method of recording the results of intelligence tests in terms of M.A.'s and I.Q.'s according to the Binet method has been subjected to a growing volume of criticism by academic psychologists. This method is, strictly speaking, applicable only to the Binet test itself. Psychologists are very prolific in the invention of other mental tests both for general abilities

and special aptitudes, many of which cannot satisfactorily be standardised against the Binet scale. Nor do many academic psychologists desire to be tied to it. Again, the concept of M.A.'s is obviously an artificial one if applied to adults. A grown-up person with a mental age of, say, 10 years will clearly be quite different from a normal child of 10. Yet if this is clearly understood the Binet method supplies a standard which is in universal use and which permits of comparisons. It is highly improbable that it will be supplanted in the near future.

At the same time the student should be aware that the dissatisfaction of academic psychologists with the method of recording results in terms of M.A.'s and I.Q.'s has led to the revival of the method of percentiles. This was invented by Galton in the last century and was used largely in psychological work in the Services during the last war. But percentiles are inconvenient to handle statistically, and they are not for many people a natural or easy way of thinking about the relationship of measurements.

A percentile rank of, say, 30 means that 30 per cent. of a representative population are below and 70 per cent. above the testee in regard to their performance in the particular test employed. The ranks between 25 and 75 may be accepted as normal, if it is supposed that half of the population can be so regarded. But it is important to know against what objective criterion a test has been checked ("validated") in order to know what it means in terms of what is wanted—for example, the probabilities or possibilities of efficiency in some particular job. (See p. 42.)

Apart from the Binet, the mental tests most commonly employed may be classified as verbal, non-verbal, and performance tests. Various vocabulary tests are examples of the first, Raven's Progressive Matrices of the second, and Koh's Block Designs of the third type.

Personality Tests.—The most satisfactory method of investigating personality is still the interview, supplemented by the testimony of friends, relations and others who have had dealings with the patient. Observation in a ward can be regarded as a test under standardised, although artificial, conditions; and the reports of nurses, occupational therapist, physical training instructors and others can be of the greatest value.

A few psychological tests of the laboratory type have been used as additional aids in the assessment of personality; their success varies considerably with the experience of the tester. Amongst such tests the Rorschach and Murray's Thematic Apperception Test have been the most widely employed. The former consists in the interpretation of ink blots, the latter in the interpretation of pictures. Both tests are based on the assumption that the fantasies of an individual will condition his response and permit of deductions as to the nature of the underlying personality.

The claims of graphologists to be able to deduce character from handwriting must be treated with even greater reserve.

Assessment of Stability.—The best indication of stability is a patient's reaction to the test of life and objective facts, above all concerning the work record, are more valuable than subjective impressions. Suspicion should always be aroused if a man has been much unemployed (except in certain depressed areas) or when he has failed to earn more as he grows older or has frequently changed his job. It must, however, be remembered that many perfectly normal young people change their jobs a good deal when in their teens before they settle down, and this may give a misleadingly poor impression. Again, the opportunities for work have been much better since the war, and consequently the history of the work record for the last five years before the war is more illuminating than what comes after. The reasons for changing jobs are often indicative of instability, neurotic tendencies and lack of persistence. Suspicion should be aroused concerning those who frequently change their jobs for no good reason or state that they did so because it was bad for their health even if this statement is backed up by alleged medical advice. Unstable individuals often seek "lighter work" either on their own initiative or as the result of pressure from friends or relations; and the medical attendant is often called in to endorse these views. Again, certain unstable individuals seek outdoor work, not so much because they like outdoor life, as because they believe or say they were told that the fresh air would be good for them. Other suspicious reasons are finding noise trying or becoming easily fatigued. there is a group who cannot stick at a job because of difficulties that repeatedly arise with their fellow-workers or with those over them.

Apart from the work record the most valuable indication of stability is evidence of sustained capacity for interest and activity as seen in the spare time occupations and hobbies. The output of physical energy of unstable individuals tends to be low and the majority of neurotic subjects do not relish team games or activities in which they can hurt themselves. In addition, many show a morbid interest in their physical health which may not result in actually being off work, but which is felt to be a handicap to them and leads to a restriction in their activities. Many neurotics also lead a very sheltered existence because they regard themselves as sensitive or highly strung, which is for them a source of self-congratulation rather than regret; and owing to their egocentricity many of these individuals are singularly deficient in a sense of humour and take themselves very seriously, even if they are fully capable of laughing at others.

The family example and tradition are often extremely important in setting both the ethical and social standards as well as the "health-conscience" of a patient, and knowledge on these points is therefore necessary in order to understand the patient's reaction to life.

#### CHAPTER V

#### TREATMENT

S has previously been emphasised, the basic aetiological principle in psychiatry is the principle of multiple aetiology. This principle of multiple aetiology implies the necessity of a multiple approach in treatment. A multiple approach is essential; but not perhaps in quite the way or for the reasons that might be supposed.

One of the villains of the piece is probably the simple therapeutic formula of finding the cause and removing it. A major deficiency in this formula is, of course, that it is not possible to remove a constitutional cause; another deficiency is that it does not mention the importance of secondary effects; and a third (closely bound up with the other two) that it fails to distinguish between the treatable and the curable, laying its emphasis on the latter to the neglect of the former.

Psychiatric methods of treatment can, like aetiological factors, be divided into physical and psychological; and, like their aetiological counterparts, physical and psychological methods of treatment are not mutually exclusive. point, however, any semblance of strict correspondence ceases and the possibility of misconception begins. particular, (the idea should not be allowed to prevail that the nature of the cause of a psychiatric condition is necessarily the main determinant of the type of treatment that should be given) Thus a psychogenic insomnia may need sedation more than psychotherapy, and an organic type of mental reaction may need psychological management rather than physical methods of treatment or drugs. It will also be evident that there is no corresponding constitutional method of treatment for a constitutional condition; but this does not imply that nothing can be done.

As has previously been emphasised (p. 26), the constitutional endowment of an individual sets an upper limit to his possibilities of achievement); and this is as true for general medicine

as it is for psychiatry. It is, however, much easier to slide over this consideration in general medicine than it is in psychiatry. This is partly because the constitutional factor in psychiatry, if not more important, is at least more prominent; and partly because the social results of psychiatric disabilities are often more striking than are those of physical disabilities. A deficiency in character, for example, stands out in a way that a deficiency in physique usually does not; and it is less readily accepted by either the individual or by Society.

Again, the potential or previous level of performance may have become permanently reduced as the result of organic disease; but here again, although there is no difference in principle, the manifestations are often most tiresome and difficult to deal with in psychiatric illnesses than they are in physical illnesses. An organic dementia is often a more troublesome social problem than a case of angina, and is apt to be less co-operative.

For these reasons, the aim of treatment, and especially of psychiatric treatment, should not be restricted to the removal or eradication of pathogenic agents or psychogenic causes; it should also be directed towards providing the individual with the best opportunities for exercising and developing his potentialities—within his limitations. Treatment cannot provide a man with potentialities he has never had, or having had, has lost. Treatment in psychiatry must, therefore, often be mainly concerned with the frank recognition of limitations and the provision of symptomatic relief. And in this connection it is essential to recognise that, just as in general medicine, treatment is often possible when cure is not, and that persistence will yield a good dividend.

Another most striking aspect of psychiatric cases, which has the most important therapeutic implications, comes from the frequency and persistence of secondary effects. Thus, for example, in a case of organic disease of the brain, the secondary reactions of psychogenic origin are often more disabling than the primary and more impersonal symptoms, such as the memory failure, that are due to the organic cause. The irritability and suspicion shown in a case of mild organic dementia are often more troublesome and disabling than the mild organic dementia is in itself; and, to further complicate the story, the organic changes may facilitate this type of response in a predisposed person. The same sequence of events can often be observed in cases that are mainly of constitutional origin, as when a patient reacts to an endogenous depression in a hysterical way, so that finally the picture may be mainly constituted by these secondary hysterical symptoms.

The picture that is seen, as in these instances, may thus be predominantly due to the overgrowth of secondary effects arising from the reaction of the personality in question to the illness, or the disability or situation resulting from illness, rather than a direct expression of the original illness itself. As is well seen in many cases of invalidism following prolonged hospitalisation, the longer an illness of any kind persists, the more likely are these secondary effects to occur; and psychiatric illnesses are apt to be prolonged.

Here, then, is one of the main reasons for prompt treatment, and for doing all that is possible during a psychiatric illness to try and prevent the development of the secondary reactions that have been described. It also explains why patients should be kept at work, or returned to work as soon as possible, since the longer they are away from it, the more difficult it is for them to go back, either because of their own feelings, or because of changes in their external social circumstances due to their absence from work, or frequently because of both these reasons combined.

(Any method of treatment, physical, psychological, environmental, may need to be applied in a case, either simultaneously or in any order, so long as they achieve the desired effect, namely the maximum the patient is capable of doing) It is obvious that treatment cannot do more; and it will usually be found that a good deal of persistence is necessary to achieve this much. Finally, although treatment should be prompt, it would be mistaken to suppose that short cuts to success can frequently be found, or that specifics are available that can easily be looked up in a book, ordered from the chemist, and then prescribed without further trouble.

Some unspecific methods of treatment will be described below; specific methods of treatment will be found in the chapters on those conditions to which they are applicable.

chapters on those conditions to which they are applicable.

Continuous Narcosis (Sleep Treatment) may be indicated in states of prolonged agitation and excitement or when a

condition of continued tension is shown. The object is to keep the patient asleep for 16 to 20 hours a day usually for a period of from 5 to 10 days, the duration chosen varying with the case and a second course being given should the condition of the patient seem to demand this when he is allowed to wake up. The technique employed varies in different centres, but usually somnifaine (2 to 3 c.c.) is given by intramuscular injection at 9 a.m. and again between 4 and 7 p.m. When necessary the sedation is supplemented by paraldehyde (2 drachms) given either by the mouth or by the rectum. The times just before the injection when the patients are relatively awake are used for nursing care (bowels, food and fluid, temperature, blood pressure, urine examination, etc.). It is essential that the patient should receive sufficient fluid and nourishment and that it should possess the necessary caloric value.

In milder conditions, four-hourly doses of paraldehyde (2 drachms) or sodium amytal (gr. 3 to 6 or 0.3 to 0.6 grms.) may be employed.

Continuous narcosis is not a form of treatment that should be undertaken without previous practical experience. It has proved of very great value in many of the acute reactions of war-time and in particular a combination of narcosis and modified insulin treatment is called for in many such cases and is comparatively safe and simple to give (see p. 241).

For lesser degrees of anxiety and restlessness bromides may be of value, but the danger of bromide intoxication should always be borne in mind, as this may occur even with small doses if continued for a long time, especially in elderly or arteriosclerotic patients. Bromide and chloral hydrate is an good combination; the latter is an excellent sedative and hypnotic, and is not cumulative in its effects. The barbiturates are also of value in states of tension. Barbital (veronal) given in divided doses of  $2\frac{1}{2}$  gr. or luminal  $\frac{1}{2}$  gr. b.d. or t.d.s., or sodium amytal 0.1 grm. b.d., often gives relief if the state of anxiety or tension is not too severe. Some patients also find the barbiturates useful to fortify themselves when likely to be confronted with a difficult situation.

Opium may be given, under careful supervision, for endogenous depression with much anxiety.

For sleeplessness paraldehyde, were it not for its unpleasant

taste and smell, would be the ideal hypnotic, for it is safe, powerful, and acts quickly. It can be given by mouth in 2-drachm doses or 4 drachms by rectum. Many of the barbiturates are also excellent: perhaps Luminal (\frac{1}{2} to 2 gr.) and Medinal (5 to 10 gr.) are the most commonly used.

It is important to give barbiturates in sufficient doses, and to be ready to change them if individual intolerance is shown; and it is often wise to combine them, *i.e.* to order one that induces sleep rapidly with another that has a more prolonged effect (Evipan and Nembutal plus Veronal or Luminal).

In prescribing hypnotics it is, of course, essential to discover whether the trouble lies in going off to sleep (as in anxiety states, or in waking up early (as in a depressive state), or in both (as in mixed states), and to prescribe accordingly.

Bromide is not a hypnotic; but may help to induce sleep by decreasing worry and restlessness.

Sodium Amutal has great interest in the treatment of stupors, and after a suitable intravenous dose (0.5 grm.), patients who have been mute and resistive for weeks and months will often begin to talk spontaneously, to answer questions, and to carry out orders. With larger doses, patients fall asleep after a period of responsiveness; hence daily injections of the drug have been suggested with the hope of combining the benefit of a continuous narcosis with periods of accessibility that might be utilised for psychotherapeutic purposes (see p. 244).

It is difficult to assess the results that have been claimed; but certainly there is some danger of the development of epileptic fits after a sudden withdrawal.

Benzedrine ( $2\frac{1}{2}$  to 10 mgm.) has been used as a direct stimulant in patients with lassitude, depression, and retardation. It is most efficient in the convalescent phase.

Modified Insulin Treatment.—Loss of weight, and frequently rapid loss of weight, is a frequent finding in many types of psychiatric illness, especially when they are recent in origin and acute in type or otherwise severe. An impaired state of nutrition is a powerful contributory factor in aggravating or prolonging such illnesses; and it is fortunately not only desirable but it is often possible to break the vicious circle by improving the patient's physical state. Weir Mitchell—with whose name this method of treatment is still associated—over-

fed his neurotic patients systematically, stimulating their appetite by means of massage and the application of faradism to their muscles. Insulin has been widely used during the last 15 or 20 years to stimulate the appetite of patients, both during their illness and during convalescence, and this method of treatment has been applied successfully to many debilitated and exhausted neurotics who had lost weight and who were physically run down, under the name of modified insulin treatment (to distinguish it from the insulin coma treatment for schizophrenia (p. 158)). Suitable patients are the physically debilitated sufferers from neurosis, preferably previous possessors of a sound personality, who have lost weight considerably in the course of recent months. Insulin is given in sub-comatose doses, beginning with 20 units and gradually increasing to 50 units, or slightly more, but not exceeding 100 units. The patient should only be allowed to develop the signs of mild hypoglycaemia consisting mainly of sweating. Three hours after the injection they are given glucose, sweetened tea and a meal rich in carbohydrates (e.g. potatoes), followed by ample food during the remainder of the day. The treatment is given on six days a week and continued for three or four weeks or until they have regained their normal weight.

The improvement in general physical health is often very striking and this is often accompanied by an equally striking improvement in the mental state. The therapeutic atmosphere in the insulin ward, the psychological effect of the patient's awareness of his progress in physical health, and the simultaneous administration of psychotherapy (for which the physical treatment cannot be a substitute) all contribute to the beneficial result.

Modified insulin treatment is also a type of treatment which should not be given without previous experience.

Narco-analysis and Abreaction.—A further discussion of Narco-analysis will be found on page 244. It may be well to emphasise here, however, that quite apart from the value of the method for psychological investigation, the administration of drugs can be used in a more directly therapeutic way for the abreaction of pent-up emotional material. The administration of ether has also been employed for this purpose and many workers prefer this technique.

The therapeutic value of emotional abreaction obtained by

such means can be very striking in suitably selected cases. The main indications are those conditions in which there is reason to suppose that the trouble is largely due to the repression of painful traumatic memories or experiences and, although dramatic results have been most commonly claimed in battle casualties, these methods have a real, if more restricted, value in civilian practice as well. It must, of course, be realised that even an apparently most successful emotional abreaction is only one step in treatment and that all patients will subsequently need further psychotherapy and re-education.

Shock Treatment.—Further mention will be found of insulin shock treatment in the section on Schizophrenia. form of treatment must be given by an experienced worker with a trained staff. Electrical Convulsion Therapy has revolutionised treatment in many psychiatric conditions, particularly depressive states of endogenous type (see p. 177) and it is particularly valuable in the older age groups. With suitable precautions, which must include a properly trained team of workers, it can be given to out-patients. In this treatment an electrical current is passed through the head and a major epileptic fit is produced. The main complications are fractures and the frequency with which these occur is largely a reflection of the technique employed. The number of physical contra-indications to E.C.T. have been further reduced as the result of the administration of Curare. Since to be paralysed with Curare is a very alarming experience it is customary to make the patient unconscious by giving him Pentothal before. Curare so dampens down the severity of the fits that the physical strain is minimised. It is now, therefore, possible to treat patients with relatively recently united fractures or even with severe hyperpiesia and myocardial insufficiency. Increasing experience shows that the frequency with which E.C.T. should be given is largely an art. psychoses may need the treatment daily during the earlier part of their illness, mild cases treated in out-patients perhaps only twice or three times a week to start with. The spacing of the treatment depends upon the response. In out-patient work perhaps six treatments in all would be about the average; some severe cases under hospital care need up to ten or twelve or even more. A number of patients complain of memory

ain ud haus

disturbances whilst receiving E.C.T. treatment. They should be warned of this possibility since it may worry them when it occurs and they can be reassured that it is a transient

phenomenon.

Prefrontal Leucotomy.—In this operation a burr hole is made on either side in the temporal region and a suitable instrument is introduced with the object of severing as many of the white fibres as possible going to and from the frontal poles. The instrument is pivoted first upwards and then downwards in a plane just anterior to the anterior horn of the lateral ventricle. The operative mortality is about 3 per cent., the main danger being haemorrhage. After the operation the patients may be restless and disturbed, but are usually apathetic and confused, frequently with incontinence, for a variable period. Put in the most general and rather crude terms, the results of the operation are (a) to reduce tension and (b) to release inhibition, the valuable effects being dependent upon the reduction of tension and the unfortunate results being dependent upon the release of inhibition. The intelligence of the patient, as judged by intelligence tests, does not seem to be materially affected, but there is always some change of personality. In other words, patients always pay a price for the benefit they may derive. On the whole, very few patients are worse and the benefit that can be derived is often most striking. Prefrontal Leucotomy is not an operation that should, however, be advised before all other methods of treatment have been employed. There can be no doubt about its value in many chronic psychoses and, as a result of the operation, many chronic inmates of mental hospitals not only become easier nursing problems, but are happier even if they may not be able to leave the hospital. The operation is also of value in a number of chronic depressive states who have failed to respond to E.C.T. or who cannot maintain the response they have made to E.C.T. The number of depressions who do not respond to E.C.T. is rather larger than the student might suppose from perusal of the literature. Leucotomy may also be well worth trying on certain chronic obsessional conditions with tension and in a variety of other neurotic states with tension whose life is miserable and who cannot be helped in other ways, Finally, leucotomy may be of value in certain cases of intractible pain.



The results obtained are also dependent upon where the cut may be made, more profound personality changes apparently tending to occur when this is made far back. It is well to remember that the results must be judged not entirely in terms of the previous personality of the patient prior to his illness, but account must also be taken of his condition at the time of the operation and his probable outlook for the future without it. A great deal will depend upon post-operative rehabilitation and the final outcome cannot be judged until many months after operative procedure. For example, patients often show far greater advance in the second six months than in the first.

General Management and Nursing Care. Major psychoses, especially when acute, should be confined to bed. Milder degrees of tension and restlessness also frequently respond well to this simple measure. Continuous baths at body temperature are indicated in severer forms of restlessness and excitement, though some now question their usefulness.

Padded rooms or cells are seldom used in modern mental hospitals, but were formerly employed in cases of severe excitement not otherwise controllable. It could be urged that they had a definite value for a certain type of case, and perhaps would still be more widely employed were it not for their unfortunate appearance and reputation.

It is often advisable to treat patients in single rooms rather than in large wards, for certain depressed patients are distressed by the noise made by other patients, and excitable patients are unduly stimulated and distracted by company. Separation, however, makes supervision and observation more difficult, and the treatment of suicidal patients in single rooms demands a large staff.

The ingenuity and inventiveness of potential suicides can never be overestimated. Some of the dangers can be guarded against by suitable planning and construction of the building, and by the adoption of certain measures in ward routine; but strict and constant supervision, combined with knowledge of the individual patient, are probably the most effective measures. Refusal of food, or of sufficient food, is common in mental disorders, and may be a disguised form of suicidal attempt. If it is impossible to induce the patient to take sufficient nourishment by other means, recourse should be had

to tube feeding without undue delay. Certain patients who do not refuse food entirely, underfeed themselves systematically. It is essential to keep an exact weight chart and, if necessary, to start tube feeding should the weight continue to drop.

Many patients tend to be constipated, and it is essential to make sure that the bowels have been properly evacuated.

# PSYCHOLOGICAL TREATMENT AND PSYCHOTHERAPY

It has already been emphasised that the psychological effects of past experiences play an important part in every abnormal mental reaction. Environmental factors do not cease to operate after the onset of mental disorder, but continue to exert a profound influence.

It should be remembered that psychotherapy, as the term is generally understood, is only one example of an environmental influence that may produce a beneficial psychological effect, and that there are other extremely important methods of giving treatment that must be regarded as psychological treatment.

In these methods of psychological treatment the object is to modify environmental factors in order to provide satisfactory environmental conditions and opportunities, rather than to deal with the individual exclusively; both these methods of approach should always be combined.)

It should be recognised that these other methods of psychological treatment may be safer, quicker, cheaper, technically easier, and that their results may last longer than treatment by major psychotherapy alone; but, of course, in order to employ them correctly it is essential to have a thorough knowledge of the problems of the individual concerned.

General Psychological Management.—The Immediate Environment.—Even severe and chronic psychoses respond to changes in their environment, such as being transferred from one ward to another, or from one hospital to another. The insistence on personal cleanliness and manners has a profound effect even upon the behaviour of deteriorated patients. Milder cases are even more susceptible to the influence of their surroundings.

Admission to a hospital involves, apart from anything else,

a sudden and complete change of environment; and how fundamental a change in the clinical picture may result from this simple measure strikes even the experienced psychiatrist again and again. After admission, the greatest care should be devoted to the question of which ward the patient should be in, or whether he would be better in a single room; and as to whether he is influenced in a favourable or unfavourable way by another patient, or by a particular nurse. In brief, the reaction of the patient to his environment must be studied most carefully, and the desirable alterations made in so far as that is possible; and it is possible to a surprising extent.

Similarly, environmental measures can be of the greatest benefit to patients who do not need hospital care. It is often essential that both patients and their relatives should obtain at least temporarily that peace which as the hymn-writer informs us only comes "with loved ones far away." Apart from the not infrequent problems of this type, the not uncommonly held belief that those who are run down just need a holiday has some justification in psychiatric experience with minor disorders.

Occupational Therapy, which is of cardinal importance in the treatment of mental disorder, is based on the elementary principle that it is a good thing for everybody, including patients, to have something to do. The name is perhaps unfortunate as tending to emphasise the aspect of filling in time, whereas stress should be laid on the far more important aspects of relieving unhappiness or discomfort by distraction, affording an opportunity for the recovery of real pleasure in activity, increasing self-confidence by tangible evidence of a capacity that had been doubted, and often enough frank training in better habits of concentration and work.

Patients suffering from mental disorders often experience difficulty in making decisions, lack self-confidence and initiative, and show a loss of interest, except perhaps in their own symptoms. To ask such patients to plan their day, and to fill in their time as they think best, is not merely to ask something that is stupid and unfair, but it is to permit something that may be positively harmful.

Consequently, a carefully planned day, with facilities for the development and enjoyment of as many interests as possible, should form an essential part of the life in every



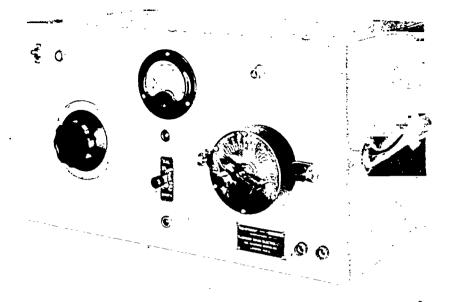


Fig. 4—Apparatus for induction of electrical convulsions. (By courtesy of Messrs. Edison Swan Electric Co.)



Fig. 5—Occupational Therapy (Crichton Royal, Dumfries).

modern mental hospital; and the same principle of careful individual planning of the best "twenty-four-hour day" that can be worked out should be applied to psychiatric patients who are not in mental hospitals.

"Occupational therapy" is not achieved by suggesting a little knitting as an alternative to brooding or the depressing comparison of rival discomforts with other patients. It should be definitely organised; thus, for example, patients should be made to go to "occupational classes" for various handicrafts (see Fig. 5). But games and entertainments are just as much a part of an occupational scheme as raffia work or carpentry, and there are other forms of valuable, practical, and interesting activities besides indulgence in the arts and crafts.

But quite apart from its value in treatment occupational therapy has considerable value in diagnosis. "Occupational diagnosis" is not perhaps a term that has gained general acceptance, but there can be no doubt about its value in this connection. Few things can be more revealing than the behaviour of the patient during occupational classes or during the other types of work that may have been prescribed.

The more chronic the condition of a patient the more should his occupation take the form of work useful to the community in which he lives. Thus the most important branch of occupational therapy in mental hospitals is commonly the employment of suitable patients on the farm, in the gardens, about the house and in maintenance work.

The more such occupation resembles the work the patient will have to take up after leaving hospital, the more valuable will it be in his rehabilitation for normal life. The transition to a fully independent life can further be aided if facilities can be arranged for the patient to work outside the hospital while he still enjoys the shelter of sleeping there and is under medical supervision.

Environmental Adjustment and Social Work.—The fuller the realisation of the aetiological importance of environmental factors in every case, the more need will be found for treatment by means of environmental adjustment. An attempted ascertainment of the relative importance of the various environmental factors is necessarily the first step and this often necessitates an objective assessment of the stress that was in fact imposed as compared with the patient's subjective

complaints. A balanced view of the whole situation can only be obtained as the result of contact with the relations, friends, work-mates and employers, and the services of a well-trained psychiatric social worker are invaluable in this aspect of psychiatric work, both for in-patients and out-patients. Suitable advice to relations and employers as to how to deal with the patient's emotional difficulties has often greater curative and preventive value than any approach that is confined to the patient himself. Most careful consideration must be given as to whether such advice should be given by the practitioner, the consultant or the social worker. Disturbances in family relationships may also require treatment, or advice and guidance to the whole family may be required. This aspect of psychiatric treatment is most striking in work with children; but it also applies to cases of marital mal-adjustment and the friction that is now so common between various generations owing to bad housing conditions and the necessity for different generations to live close together in the same house or flat. Here again the social worker is invaluable as a guide through the maze of agencies which deal with the administrative problems involved. As regards work, the suitability of the man for the job is of course the first consideration, and employers tend as a rule only to ask the practitioner or factory medical officer or psychiatrist whether a man is fit for his job after he has failed at it or has broken down. In both vocational guidance, i.e. advising a man what sort of work to undertake, and in vocational selection, i.e. choosing the most suitable man for the job in question, it is clearly necessary to have (1) information about the requirements of the job-"job analysis," and (2) an assessment of the individual's intelligence, aptitudes and handicaps, if necessary invoking for this purpose the aid of a non-medical psychologist. Over and above the intellectual and technical requirements for particular work, the emotional stresses involved and the patient's capacity to stand up to them must form important aspects of the psychiatrist's assessment on which he must base his advice. And it is perhaps in this aspect of the work that the psychiatrist can claim to make some contribution in the field of occupational guidance, personel selection and job allocation.

Recreational activities also possess great importance in an

individual's social adjustment. In Psychiatry their value was first recognised in connection with the treatment of inpatients, where games have long been employed to help the patients to overcome their isolation. More recently, educational classes, lectures and discussions have been employed for similar purposes. In out-patient work reliance must usually be placed on existing facilities such as welfare organisations, clubs and public recreational opportunities. The difficulty here is that the patients' emotional difficulties often prevent them from making use of such facilities and mere advice that all opportunities of this kind should be seized is often not good enough. More active steps need to be taken. Consequently there has been a movement to base occupational, recreational, educational and social facilities on the hospital, and hence the origin of social clubs and social activities as an integral part of psychiatric out-patient departments. The services of the patients are enlisted in the organisation of such activities. These activities form an important part of what is often called group or social treatment.

Minor Psychotherapy.—In many instances, simple explanation and discussion of the problems, and of the nature and origin of the illness, may effect great improvement. The patient may be given direct advice so far as certain personal and social difficulties are concerned; but it is preferable to do this indirectly, by helping the patient to make his own decisions. Sexual problems, at the time of puberty or after marriage, or fears of pregnancy, and subsequent neurotic reactions, can frequently be dealt with by explanation and instruction, or by referring the patient to a birth-control clinic.

Many patients, although they should certainly not be told that there is nothing the matter with them or that it is "only nerves," are able and even delighted to accept the reassurance that their symptoms are due to psychological causes only and will not seriously affect their physical fitness and mental faculties. Many sufferers from states of anxiety have no difficulty whatever in grasping the principle that the mind affects the body, that their symptoms are the *normal* accompaniments of emotional disturbance, and find that their symptoms cease or that they can put up with them, once they have understood their emotional origin. The art of this

most important part of psychotherapy is dependent upon the ability to adapt explanation not only to the patient's intellectual level, but also to his emotional needs. A nervous diffidence of manner on the part of the doctor may be as ineffective and unacceptable as a booming heartiness.

The suggestive influence of the personality of the doctor and of the atmosphere of the hospital or consulting-room are factors that are difficult to assess in any kind of medical treatment. Deliberate use can be made of these influences in treating minor psychological troubles. So-called indirect suggestion by means of the electric current or inert medicines is not a very desirable way of carrying out psychological treatment; but it can be very effective, and if it is done conscientiously, and followed up by or combined with explanation and reassurance or whatever may be necessary, it may be a time-saving method.

Persussion, though sometimes thought to be a method of influencing the patient by reasoning, always contains a large element of suggestion.

The most striking method of treatment by suggestion is hypnosis, which is a sleep-like state in which the contact between physician and patient (rapport) is not interrupted. A person in a hypnotic state is particularly susceptible to suggestion; and it is possible by hypnosis to influence many physical and mental functions that are not within the control of the will.

It is not possible to detail here the various methods of inducing a hypnotic state, but it must be remembered that only a proportion of mankind can be hypnotised. The therapeutic application of hypnosis is limited even for these. It is, however, an excellent method of removing hysterical symptoms, such as blindness, aphonia, stutter, pareses, or amnesia. The removal of a hysterical gait in a single session provides one of the most striking successes that a psychotherapist can have. Some patients, otherwise refractory to hypnosis, can be readily hypnotised after a moderate dose of a hypnotic. A further development is the production of a drowsy suggestible state by the administration of evipan or sodium Amytal intravenously (see p. 244).

Apart from facilitating therapeutic suggestions given directly, the intravenous administration of barbiturates can

be most useful in clearing up hysterical amnesias. Repressed memories are often quickly recalled when once the patient has started talking under the disinhibiting influence of the drug, which also has the effect of producing a slight euphoria. This euphoria may, however, give a misleadingly optimistic picture, since patients not infrequently display a hopeful determination with its aid which is singularly belied by their subsequent conduct.

A similar, although more elaborate procedure is the "abreaction" of repressed traumatic experiences. The patient is encouraged whilst in the state of mild intoxication to go through these experiences, which he has either forgotten or distorted according to his emotional needs; and the affect produced with the recall of these experiences can facilitate the disappearance of symptoms (see p. 67).

Major Psychotherapy.—(Major psychotherapy is called for in certain of the more complex abnormal mental reactions. It is not necessary in many minor conditions, nor is it successful in all major ones. It is not called for in those cases where physical or constitutional factors are aetiologically predominant, and it is inapplicable in the major psychoses whether acute or chronic. The patient must not be below average in intelligence and should seldom be past middle age. The field for major psychotherapy is therefore more restricted than is commonly supposed.)

Major psychotherapy takes up a great deal of time and its practice requires a special temperament and a lengthy training. For these reasons it has tended to become a special calling for the pursuit of which neither a psychiatric nor a general medical training has always been considered essential. This divorce of psychotherapy from medicine and from psychiatry is to be deeply deplored. Cases cannot be considered solely from the psychological point of view without grave danger of distortion. The natural reluctance of many medical men to hand over their patients to the care of a psychotherapist whose credentials have not received the most careful investigation is therefore justified.

Another reason for the regrettable seclusion of psychotherapists from general medical and psychiatric contacts has been the formation of various schools, each of which has not only developed a technique but a doctrine of its own. Psycho-

analysis—a term which should be employed only for the Freudian method—has expanded from its original rôle as a method of treatment to become a school of philosophy and psychology whose pupils also carry out psychotherapy but only according to the strict rules of their order. Many of the Freudian theoretical conceptions have gained general recognition and acceptance, but a large number have not; the majority of psychiatrists have not abandoned their minds to the full psychoanalytic doctrine. It is difficult to assess the results which have been claimed for treatment because so few have been published. Such results as are available do not seem to be any better than those obtained by less expensive and laborious methods. Therapeutic claims should preferably not be matters for assertion, but for demonstration.

The same criticisms may be applied to the schools of Adler and Jung which are offsprings of Freudian psychoanalysis, whose legitimacy is not accepted by the parent.

The student who takes a special interest in these sects and their rival claims must be referred to the larger text-books or to the writings of the authors themselves.

It is possible to outline the general principles of psychotherapy without reference to the tenets of any special school, but it must always be remembered that psychotherapeutic technique can be learnt from books as little as surgical technique.

The first step in any form of psychotherapy must be to obtain a careful and detailed history. It is essential to collect information from all possible sources, such as relatives and friends, in order to supplement and to correct the account given by the patient himself. The collection of facts should precede attempts to interpret them; and the elucidation of the more fundamental problems that lie behind the overt complaint or complaints is only possible in the light of these facts. At the same time it must be borne in mind that good history-taking inevitably involves therapeutic work. opportunity of talking about intimate matters to an impartial witness is often felt as a great relief. The interviews with the doctor leads the patient to a more systematic survey of his difficulties. He has to formulate his problem in words, and by this very process they often become more clear, and can be viewed more objectively.

It is often possible, during even the preliminary period of history-taking, to remove at least some of the manifest symptoms by reassurance, suggestion, or other form of symptomatic treatment; and this may enable the patient to face his other difficulties and problems with greater ease.

The next stage in the procedure consists in a systematic investigation of the patient's personality as it is, and then, subsequently, how it developed. The following topics as suggested by Diethelm in his valuable book, which can be most warmly recommended, provide a useful framework:—

- (1) Intellectual resources.
- (2) Emotional tendencies and temperament.
- (3) Volition and action tendencies, interests and strivings.
- (4) Standards.
- (5) Attitude to the body and to the instinctive desires.
- (6) Attitude to material needs.
- (7) Attitude to oneself and ability to deal with oneself.
- (8) Social needs and adjustment to the group.
- (9) Assets and handicaps and personality synthesis.

The inquiry into those factors which formed the patient's outlook, his attitudes and his relationship to his environment, should include his early life, parental influence, friendships, education and reading. Such stock-taking should enable the experienced physician to make a shrewd guess at the dynamic factors which were at work in the production of the patient's conflicts and of his symptoms which are their expression. This is also the stage to decide whether major psychotherapy is called for, or is likely to result in success. (Practical considerations, such as the time and expense involved in major psychotherapy, deserve the most careful consideration before a decision is taken to embark on it. There is a tendency for many patients to desire major psychotherapy, but in doing so they are really seeking refuge from their difficulties in prolonged discussions which, far from being of value, may only postpone the issue and make the ultimate effort at adjustment even more difficult) Again, it must be remembered that the ability to lead a useful life in spite of some discomfort may represent a better psychotherapeutic result than freedom from symptoms coupled with social ineptitude. Thus a competent Master Mariner sought treatment for impotence and

after a prolonged course of analysis gave up the sea and took up chicken-farming.

(Major psychotherapy is, in general, more indicated when the emphasis in the conflict situation is in the patient's personality rather than on the environmental stress.) (The genetic analysis of the patient's character is therefore the essence of major psychotherapy. It will be found that the patient's self-knowledge, and still more so his knowledge of the origin of his tendencies and attitudes is incomplete and distorted owing to the operation of emotional forces.

There are various methods of ascertaining and of making the patient aware of the psychological factors which, for his own good reasons, he has removed from the centre of his consciousness. The choice as to whether hypnosis, free association, and dream analysis are used to supplement systematic questioning will depend upon the personal technique of the physician, on the nature of the particular problem, and upon the necessary economy of time.

(The more active part of treatment begins with the explanation and interpretation of the symptoms. These, if possible, the patient should be guided to find and elucidate for himself. He is thus gradually led to a more just appreciation of the true nature of his problems and as to how they arose; and it is well to try to discover potential assets that have not been properly utilised, and not only to dwell on the mistakes that have been made or the deficiencies that have been shown.)

Some schools of psychotherapy teach that the mere disentanglement of the origin of difficulties has a curative effect. Lack of therapeutic success is ascribed to lack of depth of the analysis, and this leads to attempts to find the "essential" cause in the increasingly remote past.

This "buried treasure" school of psychopathology, the simple faith in the original psychic trauma which explains all and which, if unearthed, leads to cure, is, in its extreme form, a small one; but in modified forms, it is perhaps still all too common. It must always be remembered that the psychologically comprehensible is not necessarily the same as the causally significant (see p. 12), and that understanding of the remote past does not necessarily confer control of the present. The majority of experts agree that another synthetic and constructive part of treatment has to follow. To gain a more

just appreciation of the origin and the nature of the problems and to be able to assume a more detached attitude towards them means some progress; but in order to solve them more is needed. The majority of patients need to develop new attitudes and new ways of attacking their difficulties before they can deal with their particular situation.

(Only a minority of patients, or indeed of mankind, are able

Tonly a minority of patients, or indeed of mankind, are able to develop a philosophy of their own; and, therefore, the majority are more willing to accept a ready-made system and faith. These are offered not only by religion but by the various schools of psychotherapy and their adherents. The rapport developed in the course of prolonged psychotherapy often makes the patient accept the views and attitudes of his physician, be that intended or not. The achievement of an agreement with the physician's views, however correct these may be, or the achievement of good verbal insight, is not enough. It must be the final object to loosen the patient's attachment again to such an extent that he is able to adopt his new insight and philosophy as truly his own, to stand on his own feet and to translate his new insight into action and practical adjustment.)

## CHAPTER VI

# CONSTITUTIONAL ANOMALIES

O classification of normal personalities has gained general acceptance. Normal personalities are often outlined with the aid of a few of their outstanding characteristics; but although it may be quite correct, so far as it goes, to describe one individual as self-confident and fearless and another as diffident and timid, short descriptions of this kind are necessarily incomplete; whilst a fuller description embracing all, or nearly all, of the important aspects of any personality might be inordinately lengthy.

In order to overcome the disadvantages of sketchy inadequacy on the one hand or of unfocussed prolixity on the other, it would be desirable to have a personality classification erected in a framework of commonly agreed basic components; but, unfortunately, no general agreement has been reached as to what these should be. Each author who has devoted serious consideration to the problem provides a new system. Both Jung's primary classification into extraverts and introverts and Kretschmer's into the cyclothymic and the schizothymic have achieved considerable popularity; yet, without further subdivision, neither convey much information and leave a large group undefined; whilst, with further subdivision, they are apt to be a trial of memory and a cause of headache for the student who may, for example, vainly wonder whether a man is "really" a thinking extravert or a feeling introvert on the false supposition that he must fit neatly into the scheme somewhere. In this connection, the dictum of Henry Maudsley may be recalled: "As it is not Nature which makes divisions, but man who imposes his conditions on it, the prudent might well not make too much of them."

The same type of objection, namely that there is a considerable area of grey between black and white (or if you will, that people are disconcertingly piebald), may be levelled against the numerous other dichotomies, with or without subsequent proliferation into subdivisions, that have been

proposed. Some attempted classifications of personality are extremely elaborate; for example, Allport's Personality Graph takes a large number of factors into account, each of them capable of some assessment by degree—intelligence being graded from high to low; emotion from broad to narrow and from strong to weak; self-expression from assertive to submissive; insight from good to poor; and so on.

Classifications of the type mentioned above are often accused of being static in that they describe the personality as it is, or rather as it appears to the observer; whereas, if account be taken of questions of structure and development, a more dynamic formulation is aimed at and perhaps achieved.

There is general agreement that certain instincts, drives or basic needs provide the driving power behind a personality; that each man is variably endowed with them according to his constitutional equipment; and that, although they may be greatly modified in their expression by the individual's environment and experiences, these instincts, drives or basic needs are ultimately responsible for his behaviour. Schools of psychology differ as to the number of basic drives they will allow; some would explain all differences by the variations and modifications of one instinct, whilst others would argue that there are fourteen or more.

Whatever theory or modification of it may be preferred as to how it came about, a start can be made for clinical purposes with the observation that temperament and character vary within a given population as much if not more than intelligence. (See also p. 28.) Thus the distribution of courage will range from a small minority who are outstandingly brave, through a large majority with an average amount of courage, to another small minority at the other end of the scale who are frank cowards; and the same principle applies to any trait or attribute of temperament or character that may be chosen, such as irritability, sensitivity, cheerfulness, sociability.

The extreme variants are often called abnormal. In this connection, it must be pointed out that some confusion has arisen over the meaning of the terms normality and abnormality; for they are used both to express what is statistically the

average and departures from it and what is regarded as being healthy or ideal and departures from this. The point can be illustrated by a consideration of the possible meanings of "normal" height and "normal" teeth. By "normal" height would usually be meant the statistically average height; and departures from this would not necessarily be pathological; whereas by "normal" teeth would often be meant a perfect set of teeth, which statistically would be rare in this country.

In the same way, abnormalities of temperament and character may merely represent one of the extremes of "normal" human variation. Abnormal personalities or psychopathic personalities are of great psychiatric importance and often become the subject of psychiatric attention, because they are apt to be aware of their difference from the majority of mankind and to suffer from it, or because they encounter difficulties in the process of adjustment to the community, the "normal" members of which complain.

It is only possible to outline a few types of anomalies of instinct and of abnormal characters liable to become psychiatric problems. Knowledge of intellectual deficiency (mental defect) is more advanced, perhaps because the questions raised are not quite so difficult.

#### ANOMALIES OF INSTINCT

Although the existence of every other suggested instinct has been disputed, no one seems to have had the temerity to maintain that the *sexual* instinct did not exist. Anomalies in this sphere are certainly very frequent. The student should have some knowledge of normal sexual development, and of the intensity, fluctuations and variations that may normally be observed in order to form an opinion as to the significance of time of onset, frequency and type of sexual activity; and only very gross departures from what is statistically frequent should be regarded as abnormalities from the medical standpoint)

Sexual immaturity is the most common sexual anomaly, which, although seldom calling for medical treatment by itself, can frequently form the foundation of many types of sexual maladaptation which do call for medical advice.

Masturbation is a normal transitional stage of sexual development, but its persistence is often a symptom of immaturity, as may be the incapacity to find a sexual partner. Similarly, frigidity in women is often a sign of, or results from, constitutional immaturity; and the lack of desire for children may be due to the same cause. The under-development of the secondary sex-characters often suggests the constitutional origin of these psychological manifestations.

The importance of constitutional factors in the production of homosexuality varies greatly. Homosexual tendencies may often be observed in various members of the same family. It may be found in men with a feminine physique and in women with a masculine physique. On the other hand, many individuals who previously showed no evidence of homosexual tendencies, indulge in homosexual practices when placed in special circumstances, such as on board ship, or in prison. Such individuals have clearly been influenced by example and seduction. Homosexual practices are not therefore necessarily the criterion of a homosexual constitution, and the fact that the majority of homosexual prostitutes are heterosexual subjects shows this very strikingly. Again, many constitutional homosexuals never indulge in homosexual activities, in the strict sense, for fear of the legal or social consequences or because of their ethical standards.

A convenient, if schematic, working hypothesis is that both male and female elements occur in every individual, and that homosexuality results when an unusual proportion of the elements of the opposite sex occur in an individual belonging to either. It is implicit in this view that the proportion of male and female elements in each individual, being constitutional, cannot be changed. The sexual manifestation, however, will not necessarily be exactly related to the relative proportion of male and female elements in each individual case, but may be greatly influenced by special circumstances and past experience.

Since many people pass through a homosexual phase in adolescence, it is unwise to make the diagnosis of permanent inversion before the age of 25; but once this diagnosis has been made with justification, the chances of effecting a "cure" of the homosexuality are almost negligible and psychotherapeutic attempts must usually be confined to making the

patient a better adjusted homosexual and not with the hope of making him heterosexual. It is often possible to do a great deal in this way.

The typical homosexual is soft natured, sensitive and shy, and his "mother fixation" which is sometimes alleged to be the cause of his homosexuality, may be regarded as one feature of his character. The homosexual may show feminine traits in physique, gesture and in his interests. Many homosexuals also exhibit the feminine attribute of tending to view people and problems from a personal angle and show a greater interest in what others are feeling than in what they are thinking. This often leads to a keen appreciation of emotional atmospheres, but is also apt to lead to atmospherics. Many homosexuals are charming people; but they are apt to be touchy and paranoid, understanding but not dependable.

The attraction to the same sex often seems to spring from the enthusiastic friendships so characteristic of the age of puberty, and when the relationship remains on this level, whether intentionally or unconsciously, valuable and permanent friendships may result. When, however, abnormal sexuality is repressed or manifest conflicts with public opinion are threatened, neurotic reactions often develop which bring the individual to the psychiatrist.

Sexual impotence is an anomaly the frequency of which may be a cause of surprise. It is often seen in the newly wed or in men on their first sexual adventure, when it may be a cause of acute emotional distress and shame. It is also quite common as a temporary manifestation when husbands and wives have been separated. It has been said, with some justification, that it is a condition that it is either very easy or extremely difficult to treat.

It is not possible to describe abnormal sexual practices in detail, though they are of interest here because they so frequently possess a constitutional background. The majority of them (exhibitionism, sadism, masochism, and so on) can be regarded as exaggerations of normal sexual features that become evident when the development of inhibitions and adaptation does not reach their ordinary level. These anomalies come under the care of the physician when they give rise to conflicts with society, or if they become perversions, *i.e.* when they dominate the sexual life instead of being part of it.

Numerous sexual perversions are often observed in the same person, and the exhibition of only one is unusual. It is a grievous error to regard as perversions normal manifestations of sex. Thus to speak of infantile sadism and exhibitionism leads to wrong conceptions.

# CHARACTER ANOMALIES (INCLUDING PSYCHOPATHIC PERSONALITIES)

A study of the character or personality of a patient is always of great and is often of fundamental psychiatric significance, for no abnormal mental reaction can be understood without taking the personality of the patient into account. Moreover, patients with abnormal personalities are prone to develop abnormal mental reactions, and the clue to many abnormal mental reactions must at present be sought for in the personality of the patient rather than anywhere else. Yet, whilst there is often room for argument as to whether the main emphasis should be laid upon the personality of the patient rather than upon the presenting symptoms shown by that patient, e.g. anxiety or depression, there is general agreement that many abnormal and unusual people do exist who are not suffering from any of the more formally recognised types of mental disorder and that the study of such individuals is of great social and psychiatric importance. There is not, however, the same agreement as to how such abnormal and unusual people should be classified nor as to the terminology that should be used for this purpose. A potent source of difficulty in this difficult field arises from the fact that at some time or other and by some competent authority the term "psychopathic personality" has been used to designate every conceivable type of abnormal character. The majority of psychiatrists seem, however, to restrict the use of the term psychopathic personality to a group of abnormal individuals who exhibit persistent or repeated disorder of conduct of an anti-social type as their most striking feature. For such psychiatrists, the psychopathic personality is an unreliable type of individual of defective judgment, prone to impulsive acts which are often both imprudent and inconsiderate, and who is moreover unable to profit by experience. A state of confusion inevitably results when the term psychopathic

personality is used with such widely different connotations. A perusal of the literature on the subject discloses, however, three main conceptions that may be partially disentangled.

- (1) The conception of psychopathy as shown by persistent abnormality of character, no matter of what type, and including abnormalities that are not necessarily anti-social in their manifestation.
- (2) The conception of psychopathy as shown by episodic "short circuit" reactions, including uncontrolled and often explosive outbursts of all kinds, typically highly reactive to environmental factors.
- (3) The conception of psychopathy as shown by asocial or anti-social behaviour when apparently referable to the constitutional make-up of the individual and when not symptomatic of some other cause.

All these manifestations may occur with varying degrees of severity and (with the exception of (1)) frequency; but (again with the exception of (1) which is necessarily always present) they need not all be seen in the same person.

A major source of difficulty would appear to be the double use of the term psychopathic to describe both a manifestation of the second kind (or "psychopathic reaction" of a more or less transient nature), and a continuous state of the first kind, which may not be associated with explosive emotional outbursts at all.

In brief, therefore, the sort of individual whom all would agree to call a psychopathic personality shows a persistent abnormality of character with explosive emotional outbursts and asocial or anti-social behaviour. But many abnormal characters do not display this triad and for clinical convenience the whole field may perhaps be divided as follows:—

(a) Vulnerable Personalities. These personalities can perhaps best be described as potentially unstable individuals or bad psychiatric risks. These are the people who, handicapped by their constitutional loading, have a small margin of reserve and who, when pinched by circumstances are liable to develop other neurotic reactions as well as psychopathic reactions of the "short circuit" type. They may develop one type of reaction on one occasion and another on a later occasion; or, if they

are lucky, they may pass through life undetected and unscathed.)

Suitable environmental management provides an essential part of the prophylaxis and treatment of vulnerable personalities. It can be most effective. The importance of trying to fit pegs into the most appropriate hole for them has been shown very clearly in the war, and will doubtless be shown no less clearly afterwards.

The assessment of the degree of vulnerability naturally presents difficulties, but it can be estimated with some degree of accuracy from a careful scrutiny of the past history. Apart from such points as a positive family history, childhood neurosis, poor work and health record and previous breakdowns, due attention should be paid to such points as that vulnerable individuals on the whole tend to disapprove of more, to be afraid of more, and to enjoy fewer things than is normal; to be of a low physical and mental voltage and to be lacking in resilience and plasticity. They also tend to have difficulty in mixing with others and to be egocentric and vain (see also p. 60).

It may be well, however, to point out that vulnerable individuals often possess the most admirable qualities. Medical students are perhaps apt to exhibit a certain distrust of the graces coupled with an inordinate appreciation of the homespun virtues. A good ballet dancer may be more unstable, but he is also likely to be more fun than a good banker; and does not contribute less to the gaiety or pleasure of nations.

(b) <u>Unusual and Abnormal Character Types.</u>—The distinction from the vulnerable personalities must necessarily be one of degree; but here may be included the wide variety of persistently unusual and abnormal characters whose departure from the common run is more obvious than in the case of the vulnerable personalities.

Unusual personalities are not necessarily vulnerable or bad psychiatric risks, nor are they necessarily socially undesirable. They would, for example, include well-adjusted homosexuals as well as certain eccentric and remarkable individuals. Unusual personalities of such types may neither request nor require medical treatment.

But, on the other hand, many of the personalities which

may be called abnormal, such as those commonly classed as schizoids, cycloids or cyclothymics, hysterics and obsessionals, are much more likely to be bad psychiatric risks than is the case for the unusual group. Amongst these abnormal personalities, abnormality shades very readily into the definite pathological.

The schizoid character is not a uniform type. The abnormal characters found in the families of schizophrenics (which is the original meaning of the term schizoid) comprise shy, introverted, and secluded characters, nature-loving, abstract-minded, and idealistic, as well as cool, ruthless, remote and egotistical individuals, and many of the queer, eccentric and odd. The dreamy, bearded, be-sandalled denizen of Bloomsbury or Montmartre is often a schizoid, just as much as is the wild-eyed, fanatical adherent of some political or religious sect. Paranoid features, either of the more aggressive or the more passive kind, are also common. There is some positive correlation between schizoid characters and an asthenic or athletic physique.

Cyclothymic (cycloid) personalities frequently occur in the families of manic depressives. They have the reputation of being extraverted, good natured, warm hearted, sociable and adaptable, and of showing a strong positive correlation with the pyknic build: "the 16-in. neck in a 14-in. collar." Many individuals, however, who are liable to mood swings are not remarkable for these engaging characteristics. A number of individuals liable to recurrent attacks of deeper depression are normally "half a bottle under par;" whilst many of the constitutionally hypomanic cannot brook opposition and readily pass into a paranoid pet. The behaviour of certain surgeons in the operating theatre when frustrated is of this type.

An excitable, aggressive character is sometimes seen in

An excitable, aggressive character is sometimes seen in epileptic patients. The term "epileptoids" has therefore been suggested. The relationship to this disease is, however, less close than in the other two groups, although further evidence in favour of the association has recently been forthcoming from electro-encephalographic studies. Such patients show an abnormal E.E.G. with great frequency; according to certain writers in up to 65 per cent. of the cases as compared with only 10 per cent. in the ordinary population. They are commonly spoken of as explosive or aggressive psychopaths or

are classed by the physiologically minded amongst the "cerebral dysrhythmias." These personalities are common in certain families and they possess considerable importance in psychiatric practice since criminality, suicide and "short circuit" psychopathic reactions of various kinds often develop in this constitutional background. They might more properly be classed with the sociopathic groups to be considered later.

The hysterical character should be clearly distinguished from hysterical (conversion) symptoms, for they may be observed independently of one another. The cardinal feature of the hysterical character is the desire to appear more than he (or more frequently she) really is, with which is coupled a striking skill in self-deception. Hysterics are generally easily influenced by persons or ideas that appeal to them, and they have a remarkable capacity for identifying themselves with others, and for imitating them. Their emotions are easily roused, and they express their willingness to dedicate themselves to various ideals, until their enthusiasm changes for something else, which they then take up with the same conviction. The instability of their emotions, their vivid fantasy, and the adaptability of their minds make them untruthful and unreliable, although subjectively they feel quite candid, deceiving themselves much better than they usually deceive others. They are immature in their thinking and in their emotional reactions, and the sexual frigidity, which is very frequent, may be another expression of the same fact. They are often incapable of permanent affection or sexual relationships; but they are good short-time flirts, and know how to dally with the other sex to satisfy their vanity. Hysterical conversion symptoms often provide the means by which they try to dominate their surroundings, with varying degrees of success.

The obsessional (anancastic) character is not always traceable in the history of patients with obsessional neuroses, and obsessional traits are often found in the early history of patients suffering from other types of abnormal mental reaction. Obsessional features are usually described as including excessive cleanliness or tidiness, pedantry, over-conscientiousness, and persistent unsatisfiable ways of thinking—"attempting to unscrew the inscrutable" as one patient put it. Obsessional people are also strikingly characterised by their rigidity. It is only when the above features are accompanied

by the feeling of subjective compulsion that they become obsessional symptoms. The obsessional character, as such, rarely gives occasion for psychiatric interference (which incidentally is apt to be ineffective if invoked). It may be added that it is not legitimate to call merely conscientious people obsessional.

(c) Sociopathic Personalities.—The cardinal feature of this group is seen in their asocial or antisocial behaviour. They may be divided in the usual way into those who are predominantly inadequate and those who are predominantly

aggressive.

The predominantly inadequate correspond to those individuals who are frequently described as exhibiting "constitutional psychopathic inferiority;" weak willed and easily tired, they provide many of life's failures. The most prominent features are poverty of will power and determination, and this is generally shown best in their careers. They are as debris upon the sea of life, floating from job to job and frequently submerged. It is striking to see how they can improve under strict guidance, not rarely under the thumb of a suitable wife. Unstable individuals of this type are candidates for all sorts of psychogenic reactions, and they often come under psychiatric observation because of suicidal They fill the ranks of minor criminals and prostitutes. They are often asthenic in physique, and get easily tired on physical effort; their emotions do not go very deep. and change easily.

The predominantly aggressive type of sociopath is actively antisocial rather than merely a burden on others. The explosive or readily detonating type has already been mentioned; another type is seen in the family black sheep who are often plausible and shameless individuals. Sociopathic personalities often show short circuit psychopathic reactions; but on the other hand many never do so and may calmly pursue the evil tenor of their ways.

It is perhaps worth mentioning that bodily anomalies frequently coexist with the psychological anomalies in these abnormal characters and all the so-called nervous symptoms, such as tremor, restlessness, profuse sweating, vaso-motor lability with blushing and fainting, and an allergic disposition are frequently found combined with the psychopathic

anomalies, though detailed correlations have yet to be made. The same is true as regards morphological anomalies, often called stigmata, asthenic build, disproportion in physique, under-development of the secondary sexual characters, or heterosexual features.

It should be clear that these divisions do not constitute mutually exclusive entities; the members of any group may show in greater or less degree the characteristics of another. It may, however, be wise to stress once more that a good deal of the confusion that exists in this difficult and most important field appears to result from a lack of clear distinction between episodic psychopathic reactions, and continuous psychopathic states, and the further identification of psychopathic states with sociopathic states.

The student will soon have occasion to observe that a great many of the abnormal reactions he encounters are episodic affairs which, although perhaps presenting anxiety or depression as prominent features, yet do not correspond to the description he reads of anxiety or depressive syndromes, which he rightly regards as showing some persistence; nor do these episodic reactions necessarily occur in persistently sociopathic individuals. It is quite legitimate to designate these episodic reactions as psychopathic reactions, and most psychiatrists in fact do so, although this is seldom stressed in the books. Finally, psychopathic reactions can frequently be observed in the course or setting of other types of mental illness, or in the setting of high-grade mental deficiency.

Environmental factors are of great, but of somewhat different importance, in all three groups. Thus a vulnerable personality may only be susceptible to certain stimuli; protected from these specific stimuli, he may be well able to withstand other stresses. Again, the difficulties experienced by unusual personalities will vary according to the attitude adopted by the society in which they live; this is well illustrated by the different attitude adopted by different societies in the past towards homosexuality, the Hebrews regarding it as an abomination and the Greeks as the reverse. Finally, manifestations of aggression or inadequacy often depend upon the social setting in which a man finds himself placed. Thus, desertion which is an offence in the services, may correspond to repeated changes of job in civilian life which is not an

offence. It may also be pointed out that desertion may be due to a man's decision to put what he regards as the interests of his family before his own interests; whilst war-time society may argue that both should take second place to the interests of the community or the service to which he belongs and enforce this view with penalties. Experience in the war has demonstrated that incorporation in a disciplined force with rigid standards will often show up potentially inadequate and aggressive individuals as sociopathic failures and delinquents who were apparently neither before their call up.

Whilst treatment is dealt with in a separate section, it can be said that the therapeutic pessimism that is so widespread is only justified in the case of the more severe sociopaths and that, although it may not be possible to effect any radical alteration in any deeply ingrained abnormality of character, much can be done to help individuals who show certain of these abnormalities by environmental and psychotherapeutic and perhaps in time increasingly by physical measures as well.

Social and Medical Responsibility towards Psychopathy.—A tendency may be observed, especially amongst those who are not medical men, to equate psychiatric illness with irresponsibility, and to assume that a man is either sick and therefore cannot help it and in need of medical treatment, or not sick and therefore responsible and not in need of medical treatment.

The inadequacy of this view is particularly evident in certain psychopathic personalities, not only in connection with their responsibility for crimes, but also, for example, in connection with the legitimacy of issuing sickness certificates.

A satisfactory solution for this type of problem has not yet been reached, but would seem to depend upon the recognition of two points:—

- (1) Many individuals present social as well as more purely medical problems. These cases cannot be approached from one of these angles alone without doing an injustice to the facts of the case, and responsibility must be shouldered by society as well as by medicine.
- (2) The assessment of sickness on the one hand and sin or culpability on the other are two separate issues, the former being a job for the medical profession, the latter an issue for decision by society in the light of social considerations as well as medical evidence.

These points are clearly recognised in connection with crime, so that definite criteria for criminal responsibility have been laid down (see p. 213). The doctor is called upon to give evidence, but is not also called upon to be judge. And it may be observed that an admittedly psychopathic shoplifter may be sent to prison as being, on the evidence, the best thing for her, quite apart from the protection of the community.

Whilst it is certainly not suggested that a similarly drastic award would be the most suitable for an admittedly psychopathic individual who had committed no legal offence but who was also admittedly work shy, it may be observed that no similar procedure, even in principle, is available for such a case. The doctor at present may therefore be faced with the dilemma of either branding men as pure malingerers when he does not believe they are, or of certifying them as unfit for work, although he might regard work as the best thing for them if only his prescription (possibly entailing certain restrictions as to the type of work) could be enforced. Yet, without compulsory powers, such a prescription could not be enforced. No sensible doctor would desire to possess such compulsory powers, and no sensible society would give him such powers even if he did desire them; for they would involve a gross interference with the liberty of the subject, which is something that should only be sanctioned by society as a whole, if it is sanctioned at all.

There is a need for society to be better acquainted with and to realise its responsibility towards these large problems of a paramedical kind, the successful solution of which calls for a closer co-operation and understanding between society as a whole and medicine; and, in this connection, medicine could make no greater mistake than by claiming too much or by falling into the fallacy that because a problem had medical implications or aspects, it should therefore be regarded as a purely medical affair. Medicine does not take such a view of housing, and should not necessarily take such a view of the inhabitants of houses.

## MENTAL DEFICIENCY

Definition.—Mental deficiency is legally defined as "a condition of arrested or incomplete development of mind existing

before the age of eighteen years, whether arising from inherent causes or induced by disease or injury," Amentia is a term used as a synonym; whereas dementia, or mental decay, implies intellectual defect acquired in later life.

Mental defectives are usually graded as idiots, imbeciles, and feeble-minded persons (morons). The following legal definitions are useful and sufficient for administrative pur-

poses:-

√(1) *Idiots.*—" Persons so deeply defective in mind from birth, or from an early age, as to be unable to guard themselves against common physical danger."

- (2) Imbeciles.—"Persons in whose case there exists from birth or from an early age mental defectiveness not amounting to idiocy, yet so pronounced that they are incapable of managing themselves or their affairs, or, in the case of children, of being taught to do so."
- √(3) Feeble-minded (Morons).—" Persons in whose case there exists from birth or from an early age mental defectiveness not amounting to imbecility, yet so pronounced that they require care, supervision, and control for their own protection or for the protection of others or, in the case of children, that they by reason of such defectiveness appear to be permanently incapable of receiving benefit from the instruction in ordinary schools.

In addition, a fourth legal category is laid down, but since the majority of those to whom it is applicable can be dealt with under (3) it is seldom used:

✓ (4) Moral Imbeciles.—" Persons who from an early age display some permanent mental defect, coupled with strongly vicious or criminal propensities on which punishment has little or no deterrent effect."

It will be observed that these legal definitions are little concerned with intellectual deficiency as such, but are based essentially on various degrees of failure in social adaptation.) In brief, the essential issue is the practical problem of social incapacity. Consequently "any kind or degree of arrested or incomplete development of mind which is sufficient to prevent the individual from making an independent adaptation to life, and to render him in need of external care, constitutes mental defect within the meaning of the Act" (Tredgold). It is important to be quite clear on this point; for

the social incapacity which thus constitutes mental deficiency medically is not solely a matter of intellectual deficiency that can be assessed by the application of intelligence tests. Defects in temperament and character may be and often are more important than the intellectual level in determining the social adaptation that is achieved. Satisfactory and easily applicable tests for these qualities are not, however, available at the present time; whereas satisfactory and easily applicable tests for intelligence do exist. Hence it is convenient, and it has become customary, to use the intellectual level as a starting-point/in the assessment of mental defect. It must, however, be realised quite clearly that the result of intelligence tests provides only one item of information upon which the final clinical judgment is based. The significance of intelligence test results in the diagnosis and assessment of mental defect are thus analogous to the results of laboratory tests in the diagnosis of physical disease. What really matters in mental defect is the capacity for social adaptation and not the intelligence test score.

The I.Q. and Social Incapacity.—At the same time, without a modicum of intelligence as judged by tests, an independent adaptation to life is impossible. Thus, starting at the lower end of the educational scale, it can be taken that very few individuals with an I.Q. below 60 are able to fend for themselves independently in the community. Not all such cases are certified and cared for in institutions because (a) there is a woeful shortage of the necessary beds, and (b) the Act is permissive unless certain other conditions are fulfilled in addition to the existence of a certifiable degree of mental deficiency (e.g. being neglected or cruelly treated or producing an illegitimate child chargeable to the rates). Consequently, a large number of certifiably defective individuals are to be found at large; and even the most gross defective may remain at home if someone is prepared to look after him and is capable of doing so.

As the I.Q. rises above 60, a diminishing proportion show such a degree of social incapacity as to warrant their certification under the Act, and the need for certification increasingly depends upon the existence of factors other than mere intellectual backwardness, such as anti-social behaviour or instability. Very special reasons of this kind must be present before it is possible to certify as mentally defective an individual with an I.Q. above 75.

Dullards.—The term "mental defective" tends to have the implication of being certifiably defective within the meaning of the Act. It is on the whole an undesirable term to apply to mentally retarded individuals who are not certifiably defective, for it can readily give rise to misunderstanding and Preferable alternatives for those intellectually retarded individuals who are not certifiably defective within the meaning of the Act are (1) either to state what they are, i.e. individuals of limited intellectual endowments, or (2) to employ the less cumbrous term "dullard." Similarly, for those who show in addition various behaviour disturbances, it is better to speak of "unstable dullards" or of "subnormal personalities" or in certain instances of "psychopathic personalities with an intelligence below average" rather than of "unstable high-grade defective"; and it may be said very roughly that these alternatives should generally be used when the I.Q. is above 70.

Actiology of Mental Defect.—The causes of mental defect are so numerous and the types so varied that no really satisfactory classification is as yet possible. There can, however, be no doubt about the importance of the genetic factor in a substantial majority of the cases, often consequently classified as suffering from Primary Amentia; these cases may be distinguished in principle, although it is frequently difficult to distinguish them in practice, from the smaller group—according to Tredgold accounting for about 20 per cent. of defectives—of exogenous origin. In such cases of Secondary Dementia there is evidence, or it is supposed, that the development of the brain has been arrested by some adverse factor of the environment, or in consequence of some degenerative process, e.g. intrauterine causes, birth injury, early cerebral disease.

Heredity in Mental Deficiency.—A distinction can be made between high and low-grade mental defectives, the former corresponding more or less to the legal class of feeble-minded, the latter comprising roughly idiots and imbeciles. Inheritance is quite different in the two groups. The high-grade defectives are to be regarded as very backward persons. As in the case of stature, the mental defect, to the extent that

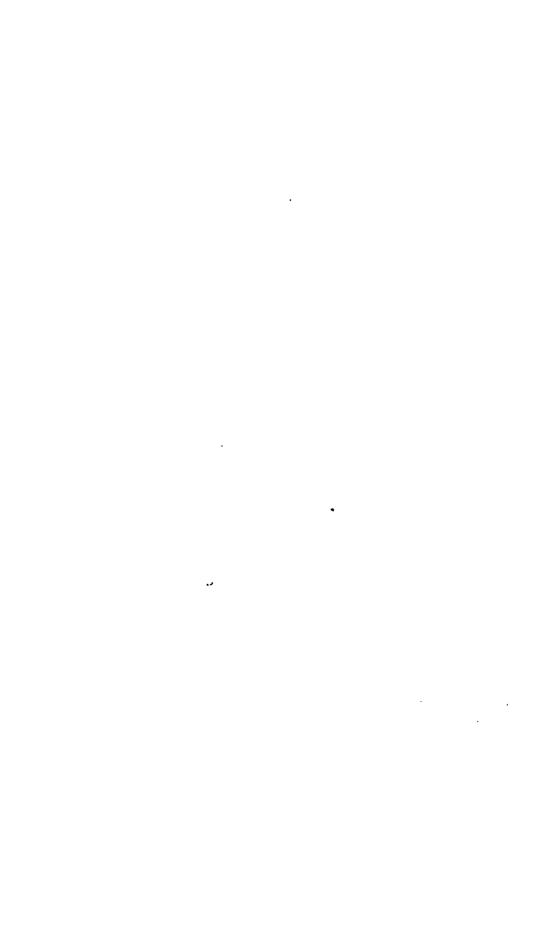




Fig. 6—A group of Mental Defectives. Note the saddle nose of the congenital syphilitic (4th from left).

it is hereditary, is to be attributed to the cumulative effect of many genes.

Low-grade mental deficiency embraces a number of different entities of different causation. Sometimes, as in Amaurotic family idiocy, the condition is undoubtedly due to a single recessive gene (but not always the same gene in different families); sometimes, as in mongolism, there is an underlying hereditary basis, but whether the potential mongol in fact develops the condition depends upon non-genetic intrauterine factors of whose nature we are ignorant. In this particular instance, however, it is known that advancing maternal age is associated with greatly increased incidence. And sometimes purely non-genetic influences, e.g. birth trauma, may cause low-grade mental deficiency.

Clinical Pictures.—Idiocy and Imbecility.—An I.Q. under 20 is generally accepted as the level of idiocy. Above 5 per cent. of the certified defectives of all ages belong to this group, but owing to the relatively high early mortality the ratio is relatively considerably higher among children. Apart from the inability stressed in the legal definition to guard themselves against common physical dangers, e.g. fire, water, traffic, none can construct sentences or converse, although some can say a few simple words, and they all need to be washed, tended and fed like infants.

Imbecility is assumed up to an I.Q. of about 45. This group constitutes about 20 per cent. of certified defectives. From the point of view of social incapacity, whilst they rank above idiots in being able to guard themselves against common physical dangers, they rank below the next group, the feeble-minded, in being incapable of work that will contribute materially towards their maintenance. They can, however, do such simple jobs as scrubbing floors or polishing brass, although they require a considerable amount of supervision even for such tasks. These low-grade defectives, *i.e.* idiots and imbeciles, often show various physical abnormalities and a variety of neurological signs in addition to their mental defect; many also suffer from epilepsy.

As regards aetiology, evidence has been adduced that the majority of idiots and imbeciles belong to the category of secondary amentias.

The Feeble-minded, Morons and the Dullard.—At the lower

end of the scale a convenient rough designation from imbecility is the capacity not possessed by imbeciles to perform work of some economic value, whilst at the upper end of the scale there is a continuous series up to normal stupidity and thence to normality. As has already been emphasised, the essential criterion for certifiable mental deficiency is gross social incapacity, but since many of the certifiably defective feeble-minded are not in fact certified, and since dullards, although exhibiting in varying degree social incapacity, are not certifiable, members of both these groups are to be found living at large in the community and their number is very large. The feeble-minded and the dullard therefore possess much greater medical and social importance than do the idiots and imbeciles (see also p. 233).

The same variations of character are found among dullards as in normal persons, but the intellectual defect, which is often coupled with poor powers of self-restraint and inhibition, provides the background for certain anomalies of behaviour, especially aggressiveness, criminal propensities and sexual libertinism. "The Fool hath no dialogue within himself, the first thought carrieth him without the reply of a second." The make-up of the individual moron may influence even the test results by means of which the intellectual level has to be gauged. Lack of interest, and of concentration and effort, may bring the results below the potential intellectual level. Special disabilities, e.g. in the field of speech, in reading, and in calculating, may have a similar effect. Performance tests, used to supplement the Binet-Simon scale or other "verbal" tests, may be of assistance in examination. Earl has shown that the relation between the "verbal" and "performance" scores is of special significance; morons with psychopathic propensities tend to do better in verbal tests, while good results in suitable performance tests point to a better social adaptability.

Feeble-minded persons contribute substantially to the number of criminals and prostitutes. Their fertility rate is higher than that of the average population, a point which has been largely used in the propaganda for sterilisation. It is, however, worth remembering that minor degrees of mental deficiency are fairly common in the lower social strata of the community, and that such persons are often useful members

of the population not easily replaced in the performance of dull and simple tasks.!!

Some Clinical Manifestations.—As has been indicated, instability is commoner in defectives and dullards than in the normal population. Unstable dullards are liable to transient episodes of confusion, excitement, anxiety or depression. Perhaps the most common syndrome is a mixed state of anxiety and hysteria with hypochondriacal complaints; whilst those with poorer power of self-control are prone to exhibit short-lived psychopathic "tantrum" reactions (see also p. 93).

The treatment of the dullard must largely depend upon the possibility of manipulating environmental factors (p. 73). Psychotherapy must necessarily be of a very simple kind.

The majority of defectives cannot be classified into separate

and more or less distinct types; but amongst the minority that can be separated in this way may be mentioned:

\*Microcephalic Idiots have very characteristic physical\*

features. The skull is not only small in circumference—17 in. or less-but it also has a characteristic shape. The forehead is low and receding, the occiput is flat and the chin poorly developed, thus making the profile unfortunate. Clinically they are usually idiots, but often at the upper level near imbecility. They are sometimes quite versatile, can occupy themselves and may be trained to do simple work. They are generally well-behaved and pleasant to other people and animals. There is some evidence that microcephaly is trans-mitted as a recessive gene, but intrauterine disease may play a part in its origin.

maurotic Idiocy is rare, but well-known owing to its hereditary character, the macular degeneration, and the

hereditary character, the macular degeneration, and the characteristic change in the nerve cells (ballooning with substitution of the Nissl substance by pre-lipoid substances).

Mongolism is a common condition. About 5 per cent. of institutional cases of mental deficiency are mongols. Mongols have a characteristically flat face with oblique palpebral fissures which suggest the name of the condition. The nose is short and broad, the tongue large and often protruded. The skin is flabby, the muscles hypotonic, the joints over flexible. There is often an ambilical harris. Their laws over-flexible. There is often an umbilical hernia. Their low resistance against common infections accounts for their early

deaths. The grade of mental defect varies. Mongols of all grades are generally of a friendly disposition, are easy to manage, and like play and music.

Tuberose Sclerosis.—This is a heredo-familial disease. It is characterised by three groups of symptoms: nervous symptoms (mental defect and epilepsy); cutaneous symptoms (adenoma sebaceum, plaques of "peau de chagrin," café-aulait spots); and fibromata (tumours of the retina, the heart, and the kidneys).

Mental deficiency is not present in all cases; where it exists its onset is always in the first two years of life, the first manifestation being developmental delay in speech, gait, and habits. In a large proportion mental defect is very profound; in some cases superimposed psychotic (catatonic) features make it appear even worse than it may be. All types of epileptic manifestations, general convulsions, Jacksonian fits, and petit mal, may be observed. Adenoma sebaceum consists of a nodular rash of yellow-red or brownish colour which covers, if fully developed, a butterfly-shaped area over the nose, the naso-labial folds (where it often begins) and part of the cheeks.

VCretinism, endemic as well as sporadic, is often combined with mental deficiency, the degree of which varies from mere dullness to the severest idiocy. The first definite symptoms, mainly physical, appear, as a rule, within the first two years of life. The mental development is retarded. The main features of the cretin's psychological state are lack of initiative, slowness, and clumsiness. Cretins are generally good-natured and easily manageable. The physical appearance is very characteristic. The results of thyroid treatment on the mental state may be considerable if treatment is started early in life. The patients become more vivid, though the intellectual state does not seem to improve.

### CHAPTER VII

## ORGANIC SYNDROMES

RGANIC syndromes are distinguished by two main criteria: (1) certain characteristic mental symptoms, and (2) the aetiological preponderance of physical factors. These mental symptoms are known as organic mental symptoms, and it is most important to be familiar with them; for without this knowledge it is not possible to assess the importance of physical findings in mental disorder, or to reach a conclusion as to whether they are coincidental or causal. Again, their presence should lead to the search for relevant physical factors that might otherwise have been overlooked.

Classification of Organic Syndromes.—It is convenient to make a necessarily rough division into those cases that are associated with permanent pathological changes in the brain and those which are not.

The former are known as organic dementias; by dementia is meant a deterioration of the personality, predominantly in the intellectual sphere, but also in the character. Impairment of memory and judgment, emotional lability, and deterioration of the finer feelings are the predominant features.

No single term has gained general acceptance to designate all the members of the second, or potentially recoverable class.

They include organic neurasthenia, clouded consciousness, delirium, twilight states and Korsakoff psychosis. There is a clear need for a dictator in psychiatric nomenclature, for some of these conditions are also known as "exogenous psychoses," "infective exhaustive psychoses," "toxic confusional psychoses," and "symptomatic psychoses" by different authors in different countries.

One syndrome may be present during the whole course of an organic psychosis, or the various types of reaction may alternate. All organic reaction types may lead to dementia, but this may develop insidiously without passing through any of the other stages. Finally, delirious episodes frequently occur in the course of a progressive dementia. Aetiology.—Except in the case of the mental changes that follow the administration of certain rare drugs, such as mescal, the mental symptoms produced by various intoxications, or different forms of physical disorder and disease, are not in themselves specific. Thus typhoid fever and pneumonia can produce the same mental picture.

The degree of mental disturbance, as well as its type, depends upon the constitution of the patient as well as upon the intensity and duration of the intoxication.

### ORGANIC NEURASTHENIA

Organic Neurasthenia implies a state of fatigue and irritability often coupled with headache, hypochondriacal attitudes, and subjective complaints of memory disturbance and difficulty in concentration.

Mild cases never pass beyond such a condition; but the symptoms of organic neurasthenia are frequently seen both in the early stages and in the convalescence of the more severe reactions to be described in the following paragraphs.

A similar picture to that of organic neurasthenia is often, however, seen, which does not result from the operation of organic causes (see Anxiety States, p. 178).

### DELIRIUM

Clinical Picture.—(a) Physical Symptoms.—Apart from the accompaniments of the infection or intoxication in question, a sluggish reaction of the pupils, nystagmus, and diplopia are often found. Slurred speech and paraphasia are not uncommon, and evidence of inco-ordination is brought out by attempted movements. Bladder control is often defective.

(b) Mental Symptoms.—Important points are the following:
(1) disorientation; (2) difficulty in grasp and coherent thinking; (3) impairment of memory; (4) increased suggestibility and responsiveness, together with a tendency to embroider or to "confabulate"; (5) hallucinations, especially visual hallucinations; (6) an anxious or fearful affect; (7) paranoid features; and (8) restlessness or psychomotor activities variously elaborated. The lucidity of consciousness changes

quickly: a patient may be deeply somnolent when left to himself, but give a few quick relevant answers when roused.

Variability in all the symptoms, which is constant unless the patient is so toxic as to be stuporose, is clearly bound up with the increased responsiveness, for these patients respond to all stimuli with abnormal facility and intensity. The increased suggestibility, with which is coupled the tendency to embroider or to elaborate, can often be shown when patients can be induced to read from blank sheets of paper, or when these patients give a circumstantial account, which is entirely untrue, of where they have been or what they have done. The same point is shown in the various misinterpretations. Every type of experience is liable to be misinterpreted. Thus, the bed-cover may be thought to be a coat; the doctor is mistaken for a relative; or a sore tongue is attributed to malicious burning. These misinterpretations are in part dependent upon expectations and fears, and they frequently, as in the last instance, display paranoid tendencies. They are also dependent upon the difficulty in grasp and coherent thinking which, in some degree, is invariably present when consciousness is clouded. The degree of the disturbance of consciousness constantly changes, but at all times attention is poorly sustained, concentration is difficult, and thought is laboured and often disconnected. These patients readily tire, are distracted by outside happenings, or sink back into the confusion from which they have been partially aroused. The memory for recent events is particularly poor, and in the more severe cases gross disorientation is shown.

Visual hallucinations are extremely common and are highly characteristic (see p. 43). They can be terrifying and are most frequent in acute intoxications. Auditory hallucinations are less frequent, but may persist for a time after visual hallucinations and evidence of gross confusion have disappeared. A smaller number of patients complain of olfactory and tactile hallucinations. The hallucinations have frequently an illusional basis.

All the points that have been mentioned are clearly seen in the paranoid attitudes and delusional ideas, which are typically transient and ill-systematised, and which are, in part at least, dependent upon the difficulty in grasp; for if difficulty is experienced in a clear grasp of what is taking place,

it is comprehensible that doubt and suspicion should arise. Further, they are in part dependent upon the increased suggestibility. Misinterpretations are often the starting-point for delusional formations.

All delirious patients at some time and to some extent feel themselves the subjects of persecution or annoyance, which may range from vague ideas of reference to more crystallised beliefs evidenced by talk of plots, gangs, wars and revolutions. Others believe they are to be poisoned or killed or tortured, or that they are in danger and about to be robbed or kidnapped.

The degree of restlessness varies, and ranges from tremor to the most highly co-ordinated and purposive movements. Many toss and turn, grope, kick, and rub. "Investigating" and occupational activities are highly characteristic. These patients will search vaguely or indulge in activities familiar to them, such as driving their cars or telling their rosaries. Finally, as might be expected, the mood is commonly a dreamy, dazed, drifting state, very labile, and with rapid changes. Perplexity, irritability, mistrust, and definite suspicion are frequently seen. Anxiety may change into frank fear, and in many fear is the dominant affect throughout. Talk of suicide or even definite suicidal attempts are by no means uncommon. On the other hand, euphoric states and phases may be seen.

Delirious states tend to become worse at night, and in mild

Delirious states tend to become worse at night, and in mild cases the patient may behave normally throughout the day, but when night falls, he tends to leave his bed, searches for his clothes, and disturbs other patients in a ward. These exacerbations or delirious episodes often coincide with a rise in temperature, hence the term "fever delirium"; but they are not uncommonly seen in arteriosclerotic or senile patients as well.

Delirium Tremens is the term commonly applied to acute delirious reactions of alcoholic origin (see below p. 140). They usually last between three and six days, and end by a crisis. Though it is quite true that alcohol is the most common cause of acute delirious reactions with confusion, restlessness, fear and vivid visual hallucinations as prominent features, yet the same picture may result from other intoxications. It is not therefore necessary to describe the symptoms of delirium tremens separately. The physical symptoms, namely, tremor, ataxia, tenderness of the nerve trunks, may lead to the correct diagnosis.

The dominant features of the delirious reaction can be summarised by the statement that it is a variable, restless, suggestible, confused and clouded state with a striking frequency of visual hallucinations and paranoid tendencies and ideas accompanied by a labile mood predominantly irritable, anxious, fearful, and depressed. Such a general statement leaves out the individual personal setting and colouring which plays a large part in shaping the delirious reaction that is shown. This connection is more obvious if the disturbances are of relatively light intensity, for if the depth of the disturbance is too great, individual differences tend to become blurred. In the less severe disturbances manic or depressive features, or whatever it may be, may greatly colour and even appear to dominate the picture.

Prognosis.—The prognosis of a delirious state will of course necessarily depend mainly upon the physical disorder or disease responsible for the condition. Physical prostration consequent upon restlessness and excitement may, however, materially alter this course, and may induce a fatal issue which otherwise would not have taken place. Broadly speaking, the unstable and psychopathic, the young and the mentally defective are particularly liable to develop delirious reactions of a wild and impulsive type.

In the vast majority of cases the prognosis as regards the mental state is excellent, and recovery is rapid and complete. There are, however, certain important exceptions. It is not uncommon to see delirious reactions resulting from alcohol or bromide superimposed upon other psychoses, and after the delirium has cleared up the underlying psychosis will then become evident and rapid recovery will not take place. A careful history should avoid this difficulty.

Again, delirious reactions may usher in a psychosis of an ominous variety which was not apparent prior to its onset. Certain schizophrenic and paranoid psychoses may start in

this way.

It is always wise to be more guarded about the prognosis if the personality of the individual sufferer is such as to give grounds in general for psychiatric concern, especially when schizophrenic features are to be observed during the course of the illness itself.

Finally, a delirium occurring in those with organic brain

disease may clear up, leaving an organic dementia of greater or less degree. Korsakoff syndrome is a frequent sequel of alcoholic delirium.

Treatment.—Attention to the underlying physical cause of the condition is of course the first consideration, but a great deal can be done in other ways.

It must be remembered that these patients are unable to differentiate or discriminate, or to grasp situations that are new, complex, and unfamiliar. Thus, particularly in the case of elderly patients, removal to the strange atmosphere of a hospital ward may precipitate mental symptoms.

Conversely, quiet, simple, and familiar surroundings tend to prevent or ameliorate delirium, and it is most important to try to reduce the chances of misinterpretation to a minimum.

Constant reassurance and explanation must be given, preferably by the same doctor or nurse, for these patients can be soothed and quietened nearly as readily as they can be upset and perplexed.

### SUB-DELIRIOUS STATES

In many cases a fully developed delirious reaction never occurs. During the day such patients may complain merely of feeling weak and tired, with difficulty in concentration, and examination may only disclose some mental dulling or slowexamination may only disclose some mental dulling or slowness. During the night, however, and in the more severe cases during the day as well, definite confusion with transient discrientation and difficulty in grasp may become more obvious. With this are frequently coupled visual hallucinations, at first hypnogogic, or of the "elementary" or simple type that has been described (see p. 42). In addition, there may at times be evidence in various forms of the labile mood change described in classical delirium, as well as fleeting paranoid tendencies or ideas of reference. Restlessness and broken sleep may also be observed sleep may also be observed.

Amongst the most common causes of sub-delirious states

may be mentioned the following:—

(1) Bromide Intoxication.—These states of simple confusion are not uncommon in the less severe degrees of bromide intoxication; and when this is so, the diagnosis is frequently missed because of the predominance of the depressive or anxiety symptoms for which bromide has been ordered.

An apparent change for the worse in any "functional" syndrome taking the form of increased suspiciousness, nocturnal restlessness, and especially increased difficulty in grasp, should always raise the possibility of bromide intoxication; and when tests for intellectual capacity (memory, calculations, etc.) reveal defects, these suspicions should be strengthened. The examination of the blood bromide will then clinch the matter.

A colorimetric test is available, which is accurate enough for clinical purposes. Normal blood bromide is 2.5 mgm. per 100 c.c., and although there is a good deal of individual variation, symptoms seldom arise with a blood bromide level of under 100 mgm. The treatment consists in giving 30 gr. to 60 gr. of sodium chloride four times daily and preferably in a cachet, and the amount given need be limited only by the occurrence of vomiting. The response to this form of treatment is specific and dramatic and it may therefore be used as a diagnostic test should facilities for estimating the blood bromide level not be available.

- (2) The Febrile Sub-delirious State of Childhood.—Children are very liable to develop these states with a rise of temperature from any cause.
- (3) Nutritional Deficiencies, with or without infection and sometimes with inconspicuous skin manifestations, may be a contributory cause in delirious reactions of obscure origin. The mental symptoms are often characterised by their striking variability. In such cases, evidence of nutritional deficiency (for example bleeding gums and skin eruptions, unexplained diarrhoea and abnormalities of the tongue, e.g. undue redness margination and atrophy of the papillae) should be carefully sought, and striking improvement has been recorded as the result of the administration of nicotinic acid in large doses of up to 1000 mgms. per diem.
- (4) Accidental or Suicidal Overdosage of Barbiturates.— These present no special features; but the history of overdosage is often difficult to obtain. The sub-delirious reaction may or may not be preceded by a period of unconsciousness, perhaps masquerading as sleep. The story may thus be that the patient woke up in the morning in a confused condition. Certain individuals have a high degree of sensitivity to the barbiturates as a group or to certain members of it.

### KORSAKOFF OR AMNESIC SYNDROME

In this variety of organic reaction which, it is important to stress, although most frequently to be observed in, is not confined to alcoholism, the memory disturbance is the most striking feature, and not the difficulty in grasp or clouding of consciousness) On the contrary, these patients may at first sight appear to be normally quick in the uptake; and often they speak with great fluency and apparent plausibility. But examination reveals gross defects in retention. These defects are most obvious in the appreciation of time relationships, especially for recent events. In order to compensate, as it were, for these memory defects, these patients confabulate, and often show the most striking suggestibility, so that they tell the most extraordinary and inaccurate tales, amplifying them with full and quite fictitious details on little pressure. A lack of initiative and a fatuous or indolent mood are commonly seen. Polyneuritis, originally described as an essential feature (polyneuritic psychosis), may or may not be present.

A large proportion of the cases of amnesic syndromes develop out of a delirious state.

The prognosis of a fully developed Korsakoff syndrome is poor, and the usual outcome is a silly, cheerful, but irritable condition, with some disturbance of initiative and grasp.

### THE ORGANIC DEMENTIAS

Mental Symptoms.—All organic dementias have many features in common, and the main characteristics have already been given. They resemble the potentially recoverable organic syndromes in that the clinical pictures also seem to be mainly referable to the intensity of action and duration of operation of the morbid process, and to be at least relatively independent of the exact nature of this process.

The possible variations in the clinical picture and course will best be appreciated by considering them under some of the more common causes responsible for their production. It must be appreciated that the various morbid processes to be described, though they tend to produce permanent pathological changes in the brain, do not always do so, with the

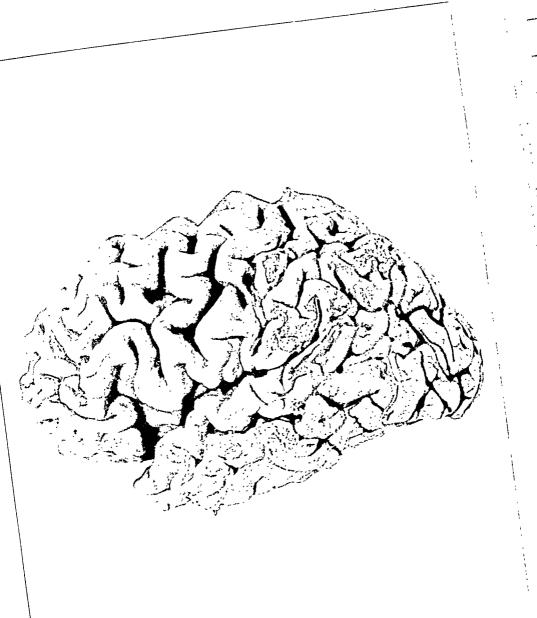


Fig. 7—Brain in General Paralysis. (Note atrophy of frontal gyri.)

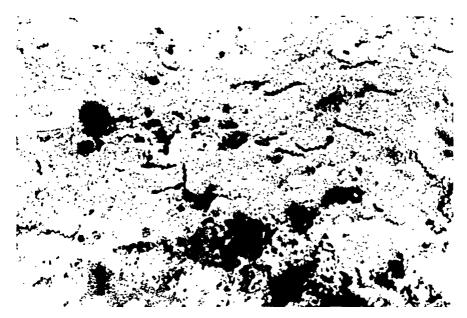


Fig. 8—Spirochaetes in paralytic brain.



Fig. 9—Section through paralytic cortex and meninges. Note thickening and infiltration of meninges; plasma cell infiltration in cortical vessels; disarrangement of cortical cell layers.

result that the degree and type of dementia, and the possibilities of partial or complete recovery or remission, vary.

### DEMENTIA PARALYTICA

(GENERAL PARALYSIS OF THE INSANE)

General paralysis is essentially an inflammatory affection of the brain which is invariably due to syphilis. Only a small proportion—possibly 5 per cent.—of syphilitic subjects develop the disease. The reasons for this are unknown, nor are any methods of prediction at present available. Nor is it exactly known why the incidence in males should be three to five times greater than in females. The greater frequency of syphilis in males is, of course, of importance.

The first symptoms become manifest at very varying periods after primary infection, with perhaps ten years as the average. The most common age of onset is between 30 and 45. Occasionally sufferers from congenital syphilis develop the juvenile form in childhood or adolescence.

General paresis is, presumably as the result of modern antisyphilitic methods of treatment, a disease that is rapidly diminishing in frequency and is now relatively rare.

Morhid Anatomy — The bones of the skyll recycle 41-11.

Morbid Anatomy.—The bones of the skull may be thickened and dense. Signs of old subdural haematomata may be present. and dense. Signs of old subdural haematomata may be present. The leptomeninges are opaque and thickened, particularly over the frontal lobes. The brain appears shrunken and is reduced in weight; the pia arachnoid is thickened and opaque and the convolutions are atrophic, especially in the frontal area. Microscopically, the disease process is characterised by both inflammatory and degenerative changes. The perivascular spaces and meninges are infiltrated by plasma cells and lymphocytes. Neuroglial reaction is marked. The nerve cells show various stages of degeneration going on to complete atrophy and disappearance over considerable areas. The frontal lobes are particularly affected, but changes may be observed in any part of the brain, including the basal ganglia (see Figs. 7, 8, 9). (see Figs. 7, 8, 9).

Serological Findings.—Wassermann and allied reactions are seldom negative in the blood and are always positive in the c.s.f. In addition the latter shows a moderate lymphocytosis,

a slight increase in protein and gold sol (Lange) curve of characteristic "paretic" type, precipitation taking place in the first three to six dilutions, e.g. 555432100.

Neurological Symptoms.—These consist of Argyll Robertson pupils (present in about 70 per cent. of cases); a slow, slurred dysarthria often accompanied by associated tremulous or twitching movements all over the facial musculature, but particularly noticeable around the mouth, lips and tongue; the facial expression is often characteristic (see Fig. 10). The handwriting becomes tremulous and careless (see Fig. 11). The tendon reflexes are exaggerated as a rule; but in some cases the symptoms of tabes may complicate the picture (taboparesis). In the later stages, a general unsteadiness and weakness, or less often spastic paralysis, develop; and in the final stages loss of sphincter control and general wasting are commonly seen. A considerable proportion of paretics suffer from fits at some stage in their illness. These are frequently followed by transient paresis or other focal signs. In certain cases a sudden epileptic seizure is the first symptom that is shown.

Mental Symptoms.—The cardinal symptom is a progressive deterioration of the personality, both in intelligence and in character; depression, excitement, stupor, and disturbances of consciousness can be regarded as accessory symptoms which may or may not be present. The onset is usually gradual; and even when the disease appears to start suddenly or dramatically, with a state of confusion or fit, a careful history will generally reveal the presence of symptoms of an organic neurasthenia previously: these include headache, fatiguability, slight complaints or evidence of memory failure, and reduced resistance to alcohol. Some change in behaviour may have been observed by relations or friends who knew the patient intimately. Thus it is common to hear that patients have been more irritable, more egotistic and less considerate than formerly; that they ate, talked, and drank more than was their previous wont, and showed less sexual restraint. Objective evidence of memory impairment, especially for recent events, names, and dates, may have been evident, and the patients may have become more careless, and their writing less tidy and correct. In spite of these early symptoms, the patients may be able to deal with their work well enough,



Fig. 10—Paralytic facial expression.

the a thing of work, I were war put into as a bound and cook as the mess. The I was not liked by any one on the place. I don't only the BERA were frew me the an the best oth medles I that all them one on one Susking they the size when Ho same in thing thirt all back the thomas Gracest shock. Even the leasting had the must they other than the past and they bear the start of Backy had the shock.

Fig. 11—Paralytic Handwriting.



especially if it is of a simple or routine nature. But they often fail when called upon to show any special initiative or judgment, or when faced with any exceptional or difficult task. This may lead to the belief that the stress imposed by the particular situation has led to the breakdown, which is thought to be of a so-called functional type; and hence diagnostic mistakes may be made unless a careful history is taken and a thorough examination carried out for organic signs.

With the progress of the illness the patient becomes more indolent and apathetic. Depression, when it occurs, is superficial. Hypochondriacal and melancholic ideas are often silly and inconsistent. Disturbances of memory are prominent features, and even when immediate retention is not so bad, recollection and reproduction of recent material is often grossly at fault. This is apparently due to the combined effects of disturbances of attention, of the capacity to synthesise, and of remembering in the more strict sense; and other factors that contribute are the disturbances of judgment that interfere with the patient's capacity to criticise and correct his own wrong answers, especially when this is combined with a lack of interest.

The final stage of the illness is characterised by a profound and generalised dementia. The defects of memory grow, until even old and familiar material, such as the dates of birthday, and of marriage, and even the names of children, disappear. The patient fabricates spontaneously, or can be induced to do so. The disturbance of memory and judgment finally becomes most profound. One patient threw his cigar butt out of an upper window, and wanted to follow it through the window to have another puff; and another patient, with optic atrophy, constantly forgot his blindness and asked for the lights to be turned on.

The most contradictory statements can be made and accepted. The mood varies between apathy and euphoria, and the characteristic emotional lability is generally evident. Hand in hand with the mental deterioration goes a progressive physical deterioration leading finally to an extreme degree of wasting and paralysis.

The course of the disease and the clinical picture may differ considerably from that which has been described. There is an acute type, rapidly progressive, often with numerous fits and a very bad prognosis. The expansive or classical form, which is nowadays rare, is characterised by a demented euphoria and ideas or delusions of grandeur. ("He, he, he," said one patient when asked to multiply five by two, "you can't catch me; ten million.")

Depressive symptoms in the depressive form may disguise the dementia, although the melancholic or hypochondriacal ideas usually lack coherence and system. Catatonic and paranoid pictures may occur in the course of the illness, the latter with relative frequency during or immediately after malarial treatment.

Juvenile paralysis develops as the result of congenital instead of acquired syphilis. There is a progressive intellectual deterioration, with the usual neurological accompaniments. The picture is even less dramatic than the simple demented form of the adult type.

Prognosis.—The diagnosis of general paralysis used to carry with it a hopeless prognosis. Recovery was unknown and over 90 per cent. died within five years of its discovery. The prognosis has changed dramatically since the introduction of malarial therapy by Wagner Jauregg. The most recent figures are 25 per cent. full and a further 20 per cent. social recoveries.

Treatment.—The patient is inoculated with benign tertian malaria either from infected mosquitoes or by injection of blood from another case under treatment. Artificially induced malaria, although generally a less severe affair than the natural disease, nevertheless constitutes a severe strain on the resources of many patients. Moreover, it is apt to result in a temporary increase in the severity of mental symptoms or to produce a flare-up of any pre-existent syphilitic affection of the blood vessels, especially the aorta. Treatment should not therefore lightly be undertaken without full hospital facilities for nursing care and observation.

The first rise of temperature takes place after an incubation period of 8-14 days, and should the patient's condition permit, he is allowed to have eight to ten rigors before the infection is terminated with quinine.

Most patients are considerably and progressively exhausted by the rigors and lose a good deal of weight. Skilled nursing care is therefore essential and every opportunity must be seized to sustain the patient's strength with the suitable nourishment between his attacks. Constant attention must also be paid to the pulse and blood pressure: signs of circulatory failure should raise the question of keeping the temperature down by small doses of anti-pyretics or may necessitate stopping the rigors before the full course has been completed.

This may be done easily enough at any time by the administration of quinine (gr. v) daily for a fortnight. This is sufficient to rid the patient of the malarial parasites. A blood examination should always be carried out to make sure of this. During the convalescence iron preparations are indicated to combat the secondary anaemia.

The first sign of response to treatment is usually a reduction of cells in the c.s.f., and in favourable cases other serological changes soon follow. Neurological signs seldom show much alteration. Improvements in the serological reactions and in the mental state do not show any close correspondence.

The mental symptoms seldom show much improvement before the end of treatment, and indeed febrile delirium during the rigors often makes the mental state appear to be worse. But after the treatment is over the mental state may continue to improve for as long as six months. It is difficult to predict the degree of mental recovery that is likely to occur, for it is dependent upon the amount of permanent brain damage and consequent dementia that has happened before treatment is instituted and this is often very difficult to assess. The more genuinely recent the onset the better the outlook; hence the cardinal importance of early diagnosis and the institution of treatment as soon as possible. Failure in these respects help to account for the fact that many patients show only relatively little improvement. Again, the nature of the disease process appears to be such that however early treatment may be instituted, the majority of cases are left with some reduction of their previous intellectual level and efficiency. The social effects of this, or even any obvious evidence that it occurred at all, are largely dependent upon the previous occupation and social status of the patient concerned. Thus a slight reduction in intellectual capacity of a successful barrister will immediately be manifest in a way in which a comparable

reduction in a manual labourer may not be. The same is true of any alterations in behaviour or social sense.

Fever therapy by physical methods has also been employed. The main advantage of these methods—be they by hot bath, electrical blankets or diathermy—is that the fever can be more easily watched. An instrument is now on the market under the name of the inductotherm.

Recent work suggests that penicillin may become the therapeutic weapon of choice.

# on interests MENTAL SYMPTOMS WITH VASCULAR DISEASE

The mental symptoms that occur with hypertension, whatever its pathology may be, can be distinguished from those that result from arteriosclerosis, though possible transitions and variations must be borne in mind.

The presence of either hypertension or arteriosclerosis often facilitates the production of other types of reaction of so-called functional type; thus the presence of the symptoms of anxiety or depression may, and not infrequently do, so dominate the picture that organic factors and organic mental symptoms may be overlooked. Similarly hysterical reactions are often "released." In fact, an old and useful psychiatric maxim is that when a patient getting on in years, or even over 40, with a clear past history, presents hysterical symptoms for the first time, particularly of the conversion type, the first thing to do is to take the blood pressure and look at the fundus.

The preliminary stage of either type of cerebral vascular disease shows the non-specific but characteristic picture of organic neurasthenia: increased irritability and fatiguability, headache, insomnia, subjective disturbances of memory, and frequently giddiness. The irritability is often associated with a tendency to become easily "flustered" (organic lability of mood).

Hypertension.—Short attacks of interruption of consciousness, very similar to petit mal, may occur. What might be regarded as an extension of the same phenomenon, namely, confusional states of variable duration and with varying features, may also call for psychiatric treatment. Such attacks may follow an apoplectic seizure; but in other cases no

neurological signs can be discovered on which the assumption of structural damage to the brain can be based. During these confusional psychoses the blood pressure may be either higher or more fluctuating than it was before.

The clinical picture may be that of delirium, and, especially when the patient is an alcoholic subject, an acute delirium. In other cases, depressive or, more rarely, manic pictures with confusional features dominate the picture; and finally ecstatic states can be observed.

*Prognosis.*—The normal duration of these attacks is a few weeks to a few months, but in some cases the psychosis lasts only a few days.

The confusions that so frequently occur at night in arteriosclerotic and senile patients may well be of the same nature.

The prognosis for these states in themselves is good; but there is always the danger that the emotional disturbance, and concomitant rise in blood pressure, may precipitate a cerebral haemorrhage.

Recovery, when it takes place, is usually complete, but repeated attacks generally leave behind residual symptoms, often at first very slight. In the long run, essential hypertension, with or without acute episodes, and with or without apoplectic strokes and subsequent focal symptoms, is liable to bring about an alteration of personality. These patients become irritable, difficult to get on with, forgetful, narrow in their outlook, labile in their emotions, and less dependable in every respect. Their intelligence is, however, very slightly impaired, and they usually retain very good insight. This, coupled with their emotional lability, tends to increased self-observation and worry about their condition, with secondary bad results on the blood pressure.

Treatment.—This vicious circle should be the object of psychiatric treatment; and even the hypertension itself may respond well to suitable psychological management and psychotherapy.

Arteriosclerosis.—In arteriosclerotics, the neurasthenic syndrome of the prodromal stage blends into that of a slowly progressive dementia. Arteriosclerotic deterioration differs from the intellectual deterioration produced by other causes, especially general paralysis of the insane, in that arteriosclerotic deterioration is more patchy and less generalised.

The façade of the patient's personality is preserved longer and more completely. For a considerable time what might be called the peripheral functions of intelligence are impaired rather than the "central" functions of judgment, reasoning, and insight.

Thus the patient may show marked impairment when examined by the usual tests for memory, but be able to keep his end up, and to conceal his defect from the outer world with the aid of a note-book or diary and a strict routine, though he may have to struggle very hard.

The disturbance of the finer feelings that is so conspicuous in early general paralysis of the insane is absent in the early stage of arteriosclerosis, but as the illness progresses it becomes more apparent. The patients develop, together with an increased emotional lability, a gradual deterioration of their higher feelings and social instincts. They become increasingly egotistic, and feel less warmly about their friends and relations. Sexual activity may reappear as the result of impaired inhibition; and, owing to the lack of opportunity or capacity for normal satisfaction, the patient may finally fall back on infantile forms of gratification, such as exposure and obscene practices with children. These patients are often referred to the psychiatrist by the courts.

Insomnia is a characteristic symptom of the early stages, and may finally lead to, or be combined with, the motor restlessness and slight confusion that develops as the disease advances. The patients become exhausted by their nocturnal restlessness and sleep half the day. They may damage themselves during these periods of restless confusion at night either by falling when they try to get out of bed, or by stumbling in their disorientated state in the darkened room.

The picture is often complicated by focal symptoms due to cerebral thrombosis.

The Differential Diagnosis from early general paralysis of the insane and cerebro-vascular syphilis is the main problem. Though the types of dementia show some characteristic differences already described, serological examinations of the blood and cerebrospinal fluid must be performed. Cerebral tumour, in an early stage, may produce a similar mental picture.

Prognosis.—The ultimate prognosis in cerebral arterio-

sclerosis is bad, but it is difficult to predict the rate of deterioration.

Treatment.—The treatment is that of arteriosclerosis in general. The psychiatric therapy is purely symptomatic.

### SENILE DEMENTIA

Senile dementia may be looked upon as an exaggeration of the usual psychological changes of old age. It is a progressive deterioration in which disturbances of memory are conspicuous. It is normal for people in their old age to become more narrow in their outlook and rigid in their views. Senile patients show these points in exaggerated form or even in caricature. In addition, they have difficulty in grasp. The combination of these factors leads to increased distrust and suspicion, and provides the basis for the numerous paranoid features of the senile. The disturbances of memory and of judgment prevent these ideas from being developed into a real delusional system; but ideas of reference and of persecution are very common. The senile patient often complains that everything is stolen from him; and such ideas are favoured by greediness and forgetfulness.

The patients become increasingly egotistic and their emotional life becomes shallow; the deaths of near relatives make little impression. In contrast to the emotional poverty, emotional expression may be increased (organic lability). Decrease of potency and loss of control account for sexual offences, such as lewd practices with little girls. A person committing such an offence for the first time in old age should always be examined by a psychiatrist. Senile dementia is often not recognised in its early stages by the layman.

The interest and initiative shown by the senile decrease often rapidly; but sometimes they develop an empty restlessness, especially in the evening and at night. They then totter about aimlessly, more or less confused, start to get up, to pack, or try to leave the room or house.

Presbyophrenia.—This is generally described as a particular type of senile dementia, and is characterised by a very gross memory impairment for recent events, coupled with an unusually well-preserved personality. These patients are generally pyknic in build and possessors of a hypomanic temperament.

The physical symptoms are those of old age. Tremor, an impassive expression, and an increase in muscle tone are often seen. Gross focal symptoms are evidence of superimposed vascular disease and do not belong to the typical picture.

The Morbid Anatomy of senile dementia shows histological changes apart from the general signs of senile involution of the brain that are not, however, entirely specific. They need not be gone into here.

The Prognosis for senile dementia is, naturally, very bad as regards recovery; the prognosis as regards life depends upon the physical state of the patient. Much restlessness and confusion tend to shorten the course owing to physical complications.

Presenile Dementias.—Whereas the usual age of onset for hypertensive disease is between forty-five and fifty-five, for arteriosclerosis between fifty-five and seventy, senile dementia rarely begins before the seventieth year of life. But there is a group of cases where a slowly progressive dementia, similar to senile dementia, is observed earlier in life, beginning in the fifties. Amongst others, the following types have been described:—

- (1) Alzheimer's Disease.—There are certain features that make the diagnosis of Alzheimer's disease possible, even apart from the age of onset. The dementia is very profound, but the behaviour of the patient and the emotional responses are surprisingly well preserved. Symptoms of aphasia, agnosia, etc., are frequent, but less well defined than when they result from focal lesions of vascular origin. Stereotyped movements and speech are very common, the latter finally deteriorating into repetitive utterances that are meaningless.
- (2) Pick's Disease is somewhat similar in its clinical picture, but differs in pathology. Circumscribed areas of atrophy can be found in the frontal or temporal lobes, or both. This disease is sometimes familial.

The clinical picture in the early stage often resembles that of general paralysis of the insane. Death occurs after six to twelve years.

(3) Huntington's Chorea is often given as a third type of presenile dementia. This is a familial disease usually occurring at the middle of life or later, and characterised by choreiform movements and intellectual deterioration. The dementia has

no particular features; changes in character sometimes precede impairment of memory and judgment, and both may be evident before the chorea develops.

### MENTAL SYMPTOMS IN ENCEPHALITIS LETHARGICA

The mental symptoms during the acute phase show nothing exceptional or particularly characteristic. After recovery from this phase the patients are often inert, restless, and slow, and the development of Parkinsonism is generally preceded by a neurasthenic picture, the patients being described as irritable, moody, and hypochondriacal. The Parkinsonian state is generally accompanied by a slowing down of all psychic processes and is not associated with a true dementia. But this general slowing is combined with loss of initiative which may give rise to a picture that resembles a dementia, and which certainly results in the reduction of the level of the previous personality; yet tests demonstrate that all the fundamental mental faculties are well preserved. Sometimes schizophrenic or paranoid pictures develop, and the obsessional and compulsive phenomena that occur during the oculogyric crises are of great theoretical interest. The patients report that during these crises they feel impelled to say or to do something. They may also show obsessional symptoms between the attacks.

Encephalitis lethargica occurring in childhood may result in a peculiar picture, and produce a very gross change in personality. After the acute phase, children may become increasingly restless, irritable, and aggressive, and appear to lose all moral sense. They beg, steal, lie, and are cruel to other children and to animals. They talk incessantly, cling to those they meet and cannot be detached, and become unmanageable at school and at home. Abnormal sexual curiosity and sexual problems are also often observed. Even in milder cases lack of concentration interferes with any successful work at school or subsequently.

Post-encephalitic adolescents sometimes show certain features of the above syndrome, especially a lack of sexual restraint.

The prognosis of post-encephalitic conditions in children

The prognosis of post-encephalitic conditions in children was originally regarded as very bad, but follow-up studies show that about one-third become socially adaptable in spite of organic brain disease, another third develop Parkinsonism.

### MENTAL SYMPTOMS IN EPILEPSY

Epileptics are often subject to periodic changes of mood, characterised by surliness and irritability. Such periods may or may not precede epileptic attacks.

Epileptic psychoses usually follow an epileptic attack, but they may also occur independently. In the first instance, the patients do not recover consciousness as usual, but remain in a clouded state, disorientated, confused, slow in grasp, and tending to perseverate. They often appear tense and perplexed, and are sometimes restless. They may wander about and are often arrested by the police because they are behaving in a strange manner. It is this type of patient who may be seen suddenly undressing in the street or exposing himself. In other cases this picture of simple dimming of consciousness is complicated by hallucinations and motor excitement, giving rise to the picture of an epileptic twilight state. The hallucinations are unusually vivid and great fear is a very prominent feature. Sometimes a religious eestatic mood and a corresponding content prevail.

Epileptics in twilight states are the most dangerous patients. They defend themselves against their supposed attackers, or attack those about them. They refuse any sort of treatment, struggle wildly, and may attempt suicide. Patients with recurring twilight states always seem to act in a very similar way. These twilight states seldom last longer than a fortnight, and are very resistant to all forms of treatment. Claims have, however, been made for E.C.T. Close supervision is necessary, and treatment by some form of continuous narcosis is often adopted. Some patients respond to luminal by the development of these twilight states and this should be borne in mind when deciding on treatment.

The student is apt to have a false idea of the frequency of epileptic twilight states, which very rarely result in a patient appearing to behave normally and only complaining retrospectively of loss of memory. Cases of "loss of memory" are almost invariably due to hysterical (escape) mechanisms.

At least two-thirds of all epileptics show progressive deterioration of variable degree, and there is some correlation between this deterioration and the number of fits. The psychological picture of epileptic deterioration can be regarded

as an attenuated form of the post-paroxysmal confusional reaction. Patients become slow, have fewer ideas and associations, and tend to express themselves in an increasingly circumstantial manner. Their mental horizon narrows, and they lose interest in all except themselves and their illness. "My fits" become their favourite topic, and there is often an interesting contrast between this increased concern and their optimistic attitude towards their disease. They tend to believe that their fits have now ceased or their number is decreasing or their severity is less. This makes it difficult to judge the result of treatment without observation in hospital. Epileptics are often outwardly submissive and polite in their peculiar circumstantial way. Many of them turn to religion and become over-devout and bigoted; but it is the devoutness of religiosity, and fundamentally they are sensitive, irritable, suspicious, and egotistic. If there are several epileptics in the same ward they usually quarrel. The epileptic disturbance of memory is mainly, especially in the early stages, a difficulty of recollection, another expression of their poverty of association. It is therefore noticeable both for remote and for recent material.

The existence of epilepsy must not necessarily be regarded as a bar to higher education or to academic training, as the follow-up of epileptics has demonstrated. Another encouraging point is that, contrary to common medical belief, a normally intelligent person who develops idiopathic epilepsy is much less likely to deteriorate mentally than one who develops symptomatic epilepsy.

### CHAPTER VIII

## PSYCHIATRIC ASPECTS OF HEAD INJURY

ENTAL symptoms are often produced by injury to the head. In the majority of cases, however, these mental symptoms are of secondary importance, the surgical aspect of the case needing and receiving primary attention. Moreover, such mental symptoms as are shown usually disappear as the patient recovers from his injuries, so that most cases of head injury are scarcely regarded as psychiatric problems at all. It is, nevertheless, important that the student should have some knowledge of the mental symptoms that may be observed and should realise that psychological handling of cases of head injury may have a considerable effect upon the prognosis and final outcome.

#### CONCUSSION

Concussion is in more severe cases a state of unconsciousness, or in milder cases a state of disturbed (clouded) consciousness, produced by a mechanical injury to the skull. Certain types of injury are more liable to produce concussion than are others. It is most readily caused by closed injuries resulting from falls on the head or the impact of "blunt instruments," it is less frequently observed when the skull is fractured with displacement of bone and it is comparatively rare in cases of penetrating injury from high-velocity missiles or stabbing wounds.

Pathology.—The exact nature of the mechanism which produces concussion is still disputed and a topic of research. Anatomical changes, such as small meningeal or cortical haemorrhages or minor lacerations, could probably be found in most cases; but they seldom lead to permanent symptoms, and almost certainly are not the anatomical substratum of concussion. Those symptoms which are produced by local or diffuse brain damage will therefore be discussed separately.

Recent work suggests that the interruption of function

which characterises the clinical picture is due to a direct mechanical effect on the neurones, commonly caused by sudden acceleration or deceleration. Sudden compression may also cause concussion. It is a moot point whether the mechanical impact affects all brain cells equally, or whether it acts on a particular centre which controls cortical activity.

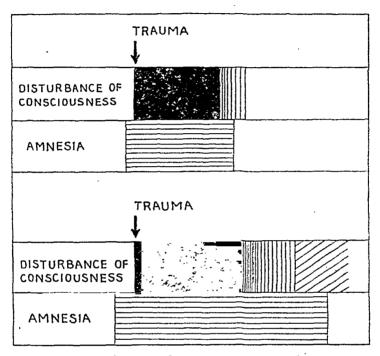


Fig. 12.—Disturbance of consciousness and amnesia in moderate (top) and severe (bottom) concussion.

Unconsciousness.

Clouded consciousness.

Korsakoff state.

Mental Symptoms.—The mental symptoms differ in the mild, the moderate, and the severe cases.

In a mild case the patient is only unconscious for a period lasting from a few seconds to about an hour. He wakes up just as he would from a deep sleep. He asks where he is and what has happened to him. He understands and accepts explanations and can correlate them with his own recollections. He does not remember the accident and is aware of his amnesia. Questions often disclose a short retrograde amnesia, i.e. a

loss of memory before the accident. Though the patient may complain of some headache—about half of them do—or feel sleepy and slow, no objective evidence of impaired mental function can be found a few hours after consciousness has been regained.

In cases of moderate severity the patient is unconscious for a longer period—perhaps a few hours. He does not wake up so quickly, but passes through a state of clouded consciousness (see p. 32) during which he may be restless and irritable. After consciousness has been fully regained, these patients show a retrograde amnesia similar to the mild cases; but their post-traumatic amnesia is longer, and covers not only the unconscious period, but also the time during which consciousness was clouded, although islands of memory for this latter period may remain.

In severe cases the patient passes through the same stages as those of moderate severity; but the unconsciousness lasts longer still—days or weeks—and during this time the patient may be very restless and resistive to nursing care. Instead of returning to normality on emerging from the state of clouded consciousness, he continues to show an abnormal mental condition which is dominated by a severe disturbance of memory. At this stage he is not drowsy, although he may be inactive and apathetic; he is capable of grasping questions and of answering sensibly and may even be quite witty in his replies; but he fails in situations or problems which test his capacity for remembering. His spontaneous retention is more affected than his capacity for remembering as the result of deliberate effort. This disturbance of retentivity results in disorientation. Memory for recent events is worse than for remote ones, recall is often erratic and the temporal sequence of events is frequently muddled. Consequently these patients often picture themselves at some earlier point in their lives. Confabulation (p. 40) is a most striking but always a secondary symptom at this stage. The more these patients are pressed for facts which their memory does not supply, the more false recollections will be produced. Even normal memory tends to oblige in this way. The amount and content of the confabulation are mainly dependent upon the previous personality and past experience of the individual concerned, but the cerebral damage sustained also plays its part. Thus a patient whose initiative is much reduced as the result of organic causes may produce very little, whilst another whose judgment and insight are grossly disturbed may confabulate to a prodigious extent.

This syndrome—disturbed retentivity and confabulation—constitutes the post-traumatic Korsakoff state, for which the patient is subsequently amnesic, although sometimes a patchy recollection of a few lucid intervals may be present.

Post-traumatic Delirium.—The gradual recovery of consciousness is occasionally interrupted by delirious episodes (p. 32). This rather unusual type of reaction after concussion is often due to accessory physical factors such as wound infection, severe loss of blood or embarrassment of the circulation. Chronic alcoholism causes a general predisposition for delirious reactions and this should always be suspected when no other cause can be found. A constitutional predisposition not associated with alcoholism is sometimes responsible.

Post-traumatic Twilight States—(see p. 32)—are rare. But it occasionally happens that a patient after a head injury, which has resulted only in a very short period of unconsciousness, or none at all, finds himself at some strange place, with no recollection of the accident or how he got there. He may during this time have behaved quite normally to all outward appearances.

Prognosis.—The prognosis of concussion as such is good. All cases which show the clinical picture described as mild or moderate recover within one to three weeks, unless after consciousness has been regained they exhibit neurological signs or psychological symptoms which point to structural brain damage. The duration of unconsciousness, or in retrospect, the duration of the post-traumatic amnesia, provides the best indication of the severity of a concussion; it is impossible to form an opinion about the prognosis so long as the patient remains unconscious. Even a mild concussion may be followed by symptoms of severe brain damage in compound fractures and penetrating injuries.

The prognosis is more serious in those cases which show the clinical picture described as severe, and a larger proportion show residual symptoms and signs, often called "post-concussional syndrome." The main features of this syndrome are

headache, giddiness, disturbed concentration and impaired memory. Post-concussional headache is much less common than physicians are apt to think. Neither its severity nor its duration is closely correlated with the severity of the injury, and it is more frequent in the post-traumatic neuroses than as the direct result of cerebral injury. A considerable proportion of those patients who develop long-lasting post-concussional headache give a history of previous liability for headache or earlier neurotic reactions. The term giddiness is very vaguely used, and only a true vertiginous sensation allows a definite conclusion as to its organic origin. Postural giddiness is more often the result of prolonged treatment in bed in the horizontal position than a true and direct sequel of the injury. Impairment of memory and concentration may last three to six months and even longer, especially in elderly patients. The differential diagnosis between the organic aftereffects—the post-concussional syndrome in the strict sense and the post-traumatic neuroses will be discussed later. The danger of post-traumatic epilepsy in cases of closed injury is comparatively small, the incidence being in the range of 1 to 3 per cent.; but in penetrating injuries the incidence may rise as high as 50 per cent.

Treatment.—It is no longer regarded as necessary to keep a patient suffering from a concussion flat on his back in bed for several weeks as older textbooks of surgery recommended. This procedure often gave the patient an exaggerated idea of the seriousness of his condition. As soon as a patient is capable of understanding advice, he should be encouraged to move his head, to sit up and to occupy himself. Nor is there any point in keeping patients with memory disturbances in bed unless surgical complications demand it. Nearly everybody tends to feel, not unnaturally, that a concussion is something much more important and dangerous than an injury to any other part of the body. The awareness of the amnesia, which is frequently interpreted as a "mental" symptom of very ominous significance, often enhances this anxiety and is another potent factor in the production of post-traumatic neuroses. Fears and doubts about these matters should therefore be discussed with the patient before he leaves hospital.

The incidence of postural giddiness can be reduced if graduated physical exercises are started at an early stage

and the same remedy should be applied at a later stage when this symptom be present.

Occupation is a therapeutic and prophylactic agent of cardinal importance in all cases who have to stay in hospital for any length of time, whether because their disturbance of consciousness and of memory is slow in clearing up, or because they need treatment for injuries to other parts of the body. On discharge from hospital the patient, and perhaps above all his relations, must be convinced that what is needed is not rest but exercise, occupation and work.

## CEREBRAL INJURY

The psychological symptoms of cerebral injury can only be detected when the symptoms due to concussion have subsided. They may be divided into disturbances of special functions or abilities, disturbances of general intelligence, and changes of personality. As regards the former (e.g. aphasia, agraphia, and apraxia), reference must be made to textbooks of neurology.

(1) Intelligence.—The complaints most commonly made in the intellectual sphere are of forgetfulness and failing concentration. These are often difficult to demonstrate objectively in mild cases, as all routine clinical tests (see p. 41) are for deliberate memorising and not spontaneous remembering. Reliance must therefore be placed upon the consistency of the patient's complaints with the observation of his behaviour as made by others. Evidence of deterioration can, however, be demonstrated in the more serious cases with the help of special tests which have been devised (e.g. Babcock's or Shipley's). Such tests are based on the observation that knowledge acquired early in the life of an individual, for example his vocabulary, is less affected by cerebral injury or disease than are, for example, concentration, retention, recall and reasoning power. The presence of intellectual deterioration may therefore be suggested by a discrepancy in the results between tests for vocabulary and general knowledge and tests for retention and reasoning. It must be emphasised, however, that all tests for intellectual deterioration are suggestive rather than conclusive, although in the hands of experienced observers they can provide a valuable aid in diagnosis and in the assessment of progress.

Mild cases show only an impairment of "intellectual efficiency" (see p. 41), but severe cases may show a reduction of the intellectual level, or true dementia, which is evident in disturbances of reasoning, judgment, and deductive and creative thinking (see p. 41). This deterioration interferes with the ability to adjust to new situations, and in severe cases even with the ability to cope with familiar problems and tasks.

(2) Character.—Deterioration of character may be shown in the fields of emotion, will, temperament, and instincts. Patients suffering from brain injury may, like other patients suffering from cerebral disease, show an abnormal emotional lability and poor control of emotional expression. The emotional change most frequently seen is an abnormal euphoria, ranging from a certain lack of seriousness to an all-embracing cheerfulness, with over-talkativeness and jocularity, loss of tact and manners. Irritability is often combined with the euphoria, and not infrequently it is the only symptom of which complaint is made. This irritability is sometimes seen in an increased susceptibility to stimuli, particularly to noise, sometimes in a difficulty in controlling emotional reactions. On occasion, irritability constitutes the patient's prevailing mood, or it may come in waves very similar to those sudden fluctuations seen in epileptics. An increased susceptibility to alcohol is the rule.

The lack of inhibition and loss of emotional control easily lead to difficulty with the environment and such patients may be very hard to manage.

Depression is more commonly seen in post-traumatic neuroses than in cases of cerebral injury, but some of the latter become morose and sullen. Certain patients show a rather striking lack of emotion or apathy, of which they themselves do not complain, but which is evident to their nurses or relatives. Loss of initiative may occur without marked emotional deterioration as shown in other ways. The patient simply fails to occupy himself, but when urged or pressed proves to be perfectly capable of taking part in games or occupation, only to relapse into inactivity when left to himself.

Loss of libido and sexual potency are not infrequent after serious cerebral injury.

The changes in the spheres of will, temperament and

emotion occur in various mixtures, but three common combinations are generally recognised: the apathetic—slow—inactive type; the euphoric—talkative—disinhibited type; and the sullen—morose—irritable—explosive type. All these syndromes may occur either with a good deal or with very little intellectual impairment.

The diagnosis of a post-traumatic personality deterioration must be based on a comparison of the patient's condition with his previous personality. The assessment of changes of this kind is often extremely difficult to make if the history as given by the patient alone is available. It is far easier to gauge the patient's previous intellectual level from his school and work record than his previous character. Those without experience should exercise caution in diagnosing changes of character due to cerebral injury when no neurological signs or evidence of intellectual impairment can be found.

Prognosis and Treatment.—The prognosis of a cerebral injury which results in a deterioration of intelligence and character is serious. Nevertheless, many patients who show gross impairment of intelligence or conspicuous behaviour disorders shortly after regaining consciousness improve considerably in time, and may recover for all practical purposes in that they are able to readjust themselves to their previous station in life, either with or without residual symptoms. No opinion as to the final outcome should be expressed before two or three months after the injury have elapsed. An estimate will usually then be possible as to the rate of recovery, although improvement may continue for twelve or even for eighteen months after a severe cerebral injury. It is then often impossible to decide how much recovery has been achieved in the medical sense rather than functional and social readjustment. But for practical purposes this does not matter either to the patient or his relations. It is essential not to make the mistake of condemning any patient prematurely to invalidism, especially with the stigma of mental deterioration attached to it.

The two most important factors in assessing the prognosis in an individual case are the patient's age and the demands on his intelligence and adaptability made by his life. Younger patients, *i.e.* those up to the age of 30 or 35, often show an extraordinary power of recovery; but beyond this age the rate of recovery becomes much slower and the final outcome

less satisfactory. Even mild intellectual loss can be very serious in an intellectual worker, whereas a labourer or farmhand can suffer considerable reduction in his intellectual level which need not interfere with his life. In those who are engaged in intellectual or creative work, damage which is too mild to be diagnosed by clinical tests may render a man incapable of carrying on in his previous vocation.

The recommendation of a change of work to a simpler occupation should only be made with caution, for it is often easier to carry on in an old routine in spite of some memory

The recommendation of a change of work to a simpler occupation should only be made with caution, for it is often easier to carry on in an old routine in spite of some memory disturbance than to learn a new one which may in itself be simpler. But if a period of trial shows that a patient is definitely incapable of carrying on with his old occupation, hesitation should not be felt in recommending simpler work.

definitely incapable of carrying on with his old occupation, hesitation should not be felt in recommending simpler work.

The development of post-traumatic epilepsy is a grave complication, and quite apart from the inconvenience of the fits, may lead to a progressive deterioration of personality. It is therefore advisable to give every patient who sustained a cerebral injury prophylactic doses of luminal for six to twelve months.

#### POST-TRAUMATIC NEUROSES

The post-traumatic neuroses must be distinguished from post-concussional syndromes.—The post-traumatic neuroses are abnormal psychogenic reactions to the physical, mental, and social effects of head injuries. Their symptomatology is very monotonous; the most frequent complaints are of headache and giddiness, of subjective disturbances of memory and difficulties in concentration. In addition, some cases show affective symptoms such as depression and anxiety, and a small proportion complain of other symptoms that may be seen in neurotic states, such as transient feelings of unreality, obsessions and compulsions. Fugues and hysterical amnesias, which are not uncommon after head injuries, will be discussed elsewhere (p. 202).

The diagnosis of post-traumatic as of other neuroses must proceed along two lines: from the negative angle, the failure to discover physical causes to account for the symptoms; and from the positive angle, the demonstration of psychological factors that do account for their origin and continuation.

The first, or negative approach by exclusion, presents considerable difficulties. A careful neurological examination should usually exclude the presence of a gross structural lesion in the central nervous system; but it must be remembered that the absence of neurological signs does not prove that such symptoms as headache and giddiness are not of organic origin, for neurological signs are often absent in indubitable cases of cerebral, cerebro-vascular, and meningeal disease. Conversely, structural lesions may be demonstrable by such methods as air encephalogram in cases who do not complain of these symptoms.

The history and clinical features of the case do, however, yield valuable information as to its probable nature. A severe injury and a prolonged period of unconsciousness or clouded consciousness (which can be roughly assessed retrospectively by the duration of the post-traumatic amnesia) are more frequently followed by symptoms of an organic type than are mild injuries, although this is certainly not invariably the case. The presence of a retrograde amnesia lasting for more than half an hour, except in a very severe injury, should suggest the probability of some hysterical complication.

Headaches of organic origin are usually severe and above all persistent: they interfere with a patient's life and activities and his sleep more continuously; they are made worse by any physical factor which affects the intracranial pressure, such as coughing, sneezing, straining, or stooping, or, as is often said, they are "postural" in type; they are not so easily influenced by psychological or emotional factors; and they respond better to analgesics. Whereas neurotic headaches, although often described as intolerable or overwhelming by the patient, are less persistent; they do not interfere with the patient's life and activities, or with his sleep, so consistently or nearly so severely as might be expected by his description; or when they do interfere with his activities, the unpleasant ones are more affected than the pleasurable. Again, observation of the patient—and this is perhaps the best test of all demonstrates that the severity of the headaches in the neurotic cases is considerably affected by emotional factors or environmental influences, rather than by physical factors, so that a discrepancy between complaint and performance may be observed. Finally, these neurotic headaches do not on

the whole respond so well to analgesics such as aspirin and phenacetin.

The complaints of giddiness or dizziness are often used very loosely to describe all sorts of unpleasant sensations, such as head discomforts, difficulties in concentration due to emotional perturbation, "light-headedness," transient feelings of unreality, and only occasionally true vertigo. Dependence upon postural factors is again more significant for an organic origin, whereas neurotic cases are more affected by emotional factors or mental effort.

Intolerance to alcohol and heat are characteristic symptoms of the post-concussional syndrome.

The diagnosis of organic disturbances of memory or concentration, as opposed to neurotic complaints of this kind, has already been described. If a patient, without fairly severe affective symptoms, can give a factual illustration of his poor memory, such as that he went to a shop but forgot what he had meant to buy, this is in favour of an organic condition. The complaints made by uncomplicated neurotic cases are usually of a very generalised kind and are seldom so concrete as this. Here again it is most important to compare the subjective descriptions given by the patient with his objective behaviour as observed by others; if he is noticed to be definitely forgetful this is strongly in favour of an organic cause.

It must be remembered that all clinical tests for impairment of memory are dependent upon the patient's co-operation, and that emotional disturbance may give a misleading result. Test results or scores therefore are of little value unless the examiner is satisfied that the patient has co-operated to the best of his ability, and has not been distracted by pain, or was not fully responsive owing to his emotional condition. Yet even when the patient's condition is such that little value can be placed upon the test score, the observation of his behaviour during the test may be extremely valuable as revealing his attitude and type of emotional response or lack of emotional control.

The difficulties inherent in making a positive diagnosis of minor organic mental changes makes the demonstration of a psychogenesis all the more important in the diagnosis of posttraumatic neuroses. In view of the fact that organic damage may result in emotional changes, a special watch must be taken against the possible fallacy of a "spurious psychogenesis" (see p. 11). A large number of patients suffering from minor organic disease show in addition an hysterical exaggeration or prolongation, and when this is suspected the psychogenesis must be sought.

The psychological factors at work may be of a general or of an individual kind. The former type of factor is illustrated by the higher incidence of post-traumatic neuroses after industrial than after sport accidents, or in insured as opposed to uninsured persons, or in soldiers as opposed to civilians. Again, such symptoms as headache and giddiness are very common symptoms in all types of neurotic states and are to be seen, for example, in about 70 per cent. of cases of effort syndrome. But general considerations of this kind cannot be regarded as sufficient to account for the exhibition of the symptoms in an individual case. Most cases of concussion do not develop a neurosis in spite of insurance and compensation claims and the majority of soldiers with head injuries soon go back to duty.

The hope for financial gain, in the form of pension or compensation, is often over-emphasised as an aetiological factor in the production of post-traumatic neuroses. When such an intention is fully conscious the case is one of malingering and not of neurosis; but when the intention is not fully conscious its psychological significance varies considerably. In some cases the intention seems to be to punish the guilty or to receive just compensation for an innocently suffered wrong. In other cases the monetary compensation enables a patient to succumb to or keep up a neurosis which in fact has its origin in conflicts not necessarily connected with the accident In other cases the accident acts as a psychological trauma; the experience of a serious threat to life and limb releases anxieties with which he is unable to cope and thus causes a neurotic reaction. Each patient must of course be considered individually, and the psychogenesis of a posttraumatic neurosis can only be assessed in the light of each individual patient's personality and life history. These do not reveal a clear evidence of neurosis or psychopathy in every instance. All that can be expected and is usually found are traits of character which render the individual liable to break down under the stress of special circumstances, but which have never previously given rise to serious maladjustment or to the formation of symptoms.

Prognosis and Treatment.—As in all neuroses, the prognosis depends upon the patient's personality and on the possibility and opportunity for the solution of his difficulties and conflicts. A bad family history, a psychopathic personality, a long-standing history of hypochondriasis, low intelligence, and previous breakdowns, especially when precipitated by relatively little stress, all make the prognosis poor; and the presence of one or all of these factors reduces the prospects of a man's return to duty in war-time. A transfer to a more suitable job may be called for in war cases when dangers and difficulties in the previous job had been shown to be aetiologically significant. Conflicts and difficulties connected with the patient's home life may be amenable to social and welfare work. In general, the methods of treatment discussed for cases suffering from other neuroses (see page 71) are also applicable to the post-traumatic ones.

It is becoming increasingly recognised that a large proportion of the patients who complain of nervous symptoms after head injuries should be regarded as suffering from post-traumatic neuroses rather than from organic or post-concussional syndromes. Prophylaxis and early treatment of a suitable kind are matters of supreme importance and can yield excellent results, because these patients are under medical observation during the critical period of the development of their illness. There is no better method of producing a post-traumatic neurosis than to ask a patient repeatedly after a head injury whether he does not suffer from headache, or to advise him to keep as quiet as possible lest he should suffer from one. or to tell him to report a headache as soon as he gets one. During the convalescent period these patients are in a highly suggestible condition and need skilful psychological handling in order to prevent the development of hypochondriacal fears which may lead to prolonged invalidism. There can be little doubt that much more harm can be done by advising these patients to go slow rather than by trying to make them go too fast. Occupation and graded physical exercises should be instituted at the earliest possible moment, and there is no better way of convincing a patient that he can do more than he thought than by a practical demonstration of this kind.

## CHAPTER IX

# DRUG ADDICTIONS

#### ALCOHOLISM

CUTE Alcoholic Intoxication.—The first symptoms of intoxication are usually increased talkativeness and mild euphoria, to be followed later by failure in concentration, superficial thinking, irritability, and lack of judgment and insight. With increasing severity, a progressive paralysis of mental and physical functions takes place, terminating in coma. Individuals vary very considerably both in their tolerance and in the sequence in which symptoms are shown: in some, physical symptoms, such as slurred speech and other evidence of motor inco-ordination, appear very early; in others, mental symptoms alone may be observed until an advanced stage of intoxication has been reached.

The most common psychiatric problem is the influence of alcoholic intoxication on a person's ability to drive a car. Under the Traffic Act of 1930 it is an offence to be "under the influence of drink or a drug to such an extent as to be incapable of having proper control of a vehicle." The physical symptoms should be noted with particular care in the examination of a driver suspected of being under "the influence," as they often appear to be more convincing to the layman in court than evidence of mental or emotional abnormality. although the latter may really possess greater medical relevance. Special attention should therefore be paid to the smell of the breath, flushed face, full and rapid pulse, wide and sluggish pupils, and evidence of motor inco-ordination. Test words should be tried to demonstrate dysarthria, and it is always useful to take a specimen of the handwriting. The patient's mood, his memory for recent events, and his ability to do simple arithmetic should all be noted on the psychological side.

It is now possible to make estimations of the alcoholic content of the blood, and the concentration of 2.5 mgm. per 100 c.c. almost certainly renders an individual incapable of driving properly. Individual tolerance is of greater importance with lower readings.

Patients with cerebral disease, particularly those with epilepsy, or cerebral injury, are liable to show, after very small doses of alcohol, severe signs of intoxication, such as drowsiness, irritability or excitement. This is an important point to remember as it can constitute a mitigating circumstance.

Alcoholic Coma.—In absence of a history, alcoholic intoxication must be considered in the differential diagnosis of unconscious patients. The smell of the patients' breath is generally a reliable guide; but it must be remembered that patients are often given brandy or whisky when feeling faint. It is important to exclude insulin coma, as the development of symptoms after an overdose of insulin is very similar to that after alcoholic intoxication.

Chronic Alcoholism.—The moderate consumption of alcohol is a normal social habit in these Isles. Chronic alcoholism can be said to exist as a medical problem only if (1) the amount consumed is excessive; (2) the individual develops definite symptoms, physical or mental, when the supply is interrupted; or (3) when signs of organic deterioration (see p. 41) occur.

The reasons for excessive drinking are sometimes (1) environmental, as in the case of publicans and bar-keepers, or certain social sets. In many of these cases the individual may be the possessor of a normal personality. More commonly, however, the reason must be sought in personal maladjustment in the individual concerned. This may be of (2) constitutional origin; and a large proportion of psychopathic personalities can be found amongst alcoholics; or it may be a (3) neurotic reaction to personal difficulties, amongst which a lack of social self-confidence must be ranked very high. Social factors of a more general kind, such as poverty and slum-life, are less important than they used to be, and alcohol is on the whole becoming increasingly the prerogative of the more prosperous sections of the community, who can afford to get drunk. Finally, the reason for excessive drinking may be (4) symptomatic of a more definite psychiatric illness, as when a sufferer from an endogenous depression seeks consolation in the bottle. The lack of inhibition in the early stages of paresis or manic excitement may also lead to alcoholic excess. such cases a history of symptoms preceding the consumption of alcohol will possess crucial importance, particularly for forensic purposes.

Symptoms.—Irritability and forgetfulness are usually the first signs of deterioration; but as this progresses the patients become inefficient and negligent in their work, careless in their habits, tactless and aggressive. Whereas alcoholics are often congenial and humorous after they have had their drink, they are often depressed, irritable and aggressive before it. They must be judged not by their behaviour in society, but whilst at home or at work, where their behaviour leads to Their expenditure of money often innatural difficulties. volves them in fresh problems, for which they will always find excuses; they tend to be singularly deficient in insight, and cannot be convinced that drinking is the real source of their trouble. All alcoholics tend to become suspicious of any friend who offers them advice, and nearly all of them have difficulty in their married life. Many of them are very jealous of their wives, in which development the loss of sexual potency, which is a common result of chronic alcoholism, plays a part. In severe cases these ideas of jealousy gain delusional force which the patient tries to verify by traps and detective work.

The first symptom that the patients are usually willing to admit is a falling off in their capacity to hold their liquor. This becomes noticeable when and is evidence that cerebral damage has taken place. Many cases come under observation because of some physical complication, such as gastritis, polyneuritis or cirrhosis of the liver. The chronic alcoholic will often show an apparent frankness, not without a spurious kind of charm, but which is in fact closely allied to shamelessness. The doctor should also realise, even if his fellow club members do not, that when the inebriate proclaims he is putting all his cards on the table, a number are probably face down.

The treatment of chronic alcoholism in general is essentially a social problem, and there can be no doubt that early hours of closing and increased price have reduced the admission of alcoholics to mental hospitals more than anything else; but the better opportunities for social living in recent years, such as improved housing conditions, the cinema and the radio, have made a very substantial contribution. A general social prophylaxis along these lines could be developed still further.

Unless the drinking is symptomatic of mental disorder which is susceptible of treatment, the treatment of the individual

case tends to be most unsatisfactory, largely because there are no legal means at present of ensuring that patients should be under treatment for a sufficient length of time. Alcoholics show a rather characteristic facile optimism about their future and will nearly always leave a hospital or nursing home before they should do so. It has therefore been said with some truth that the effects of treatment at present are merely to fit the patient to start drinking again. A confirmed case needs institutional treatment for many months, which should be followed by prolonged psychotherapeutic supervision. As much social and psychological pressure as possible should be brought to bear to try to achieve this. Each case must, of course, be studied individually, and in the early stages a proportion of cases can be cured by suitable psychotherapy.

Acute alcoholic hallucinosis is a rare condition, which generally starts after an excessive drinking bout. In it hallucinatory voices, commonly reproachful or threatening, and occurring without much clouding of consciousness, are the predominant features. The mood is usually one of fear and anxiety, although traces of alcoholic jocularity may be observed. Some cases turn out to be schizophrenics who have taken alcohol to drug themselves in the first stage of an acute schizophrenic episode.

Chronic alcoholic hallucinosis is equally rare. It may develop after an acute hallucinosis, or it may be insidious in onset. In either instance it is characterised by numerous auditory hallucinations in a clear setting and without much disturbance of behaviour. The voices are characteristically repetitive and rhythmical—"idiot, idiot, idiot" or "beggar, beggar, beggar." The condition tends to be chronic and some patients get used to their voices and will carry on with their work in spite of them. More frequently delusional misinterpretations occur and the patients become so paranoid as to require institutional treatment.

Acute Alcoholic Delirium—(Delirium tremens)—is most commonly seen amongst drinkers of spirits. The onset is often acute, precipitated by a drinking bout with insufficient food intake, or by a physical illness or injury, or by a forced change in nutrition and habit, such as follows admission to hospital or prison. The onset may also be subacute and preceded by nocturnal anxiety, nightmares, and often hypno-

gogic hallucinations, for a few days before the actual delirium starts. About one-third of the cases start with an epileptic fit. The clinical picture has been described under Delirious States (see p. 106). Characteristic (though by no means diagnostic) features of the alcoholic delirium are the tremor of fingers and hands and signs of polyneuritis on the physical side, and the quick-moving hallucinations of small animals (rats, mice) in the mental symptomatology. "Occupational delirium" is not uncommon; a mixture of anxiety and jocularity is fairly characteristic of alcoholism, but does not exclude other aetiology of the delirium.

It is not always realised that alcoholic delirium is a serious condition and that about 10 per cent. of the cases die from circulatory failure. Of those who survive about one-third develop Korsakoff psychosis, from which they emerge with a more or less marked degree of dementia. In the classical cases delirium ends abruptly usually after a long sleep, after lasting for between three and five days. Treatment with drugs tends to make the recovery less dramatic.

Treatment in hospital is essential, and a mental hospital is usually more suitable than a general one. In the latter, consideration for the other patients often demands the administration of more drugs than are really required should proper facilities exist for isolation. An initial dose of hyoscine is often required, and this can be followed by paraldehyde given with the necessary amount of fluid, calories and vitamins through a stomach tube. Regular doses of insulin with the necessary amount of carbohydrate to prevent hypoglycaemia have been recommended and seem to quieten the patient even if they do not cut short the course of the delirium. Large doses of vitamin B1 are worth trying.

Probably the least unsatisfactory treatment of severe alcoholism is by means of deconditioning with the aid of emetine or some other emetic drug. The patient is given such a drug together with alcohol and is inevitably extremely sick. The rationale of this treatment is to produce a conditioned reflex between sickness and the taste of drink. This treatment is extremely unpleasant, but can be carried out fairly quickly and the results claimed are less unsatisfactory than by other methods. A great advantage is that the active part of treatment only takes about a fortnight or three weeks, although

since the patients lose weight they need to remain in hospital for a longer period to be built up again. It is useless, however, to attempt this aversion or deconditioning treatment unless the personality of the patient is reasonably well preserved and he is willing to be co-operative.

The technique of administration possesses great importance in the results achieved. Few psychiatrists seem gifted with the personality that is so important for success in a technique that depends so largely, as this does, upon suggestion.

#### OTHER DRUG ADDICTIONS

Addiction is caused by drugs which not only produce tolerance and habituation but also physiological disturbances which are noticeable after their withdrawal. The best example of this type of drug is morphia. The pleasant sensations temporarily achieved lead to a fresh dose, a habit is then formed, increasing doses are necessary to produce the desired result, and after a short time metabolism is influenced in such a way that withdrawal symptoms develop if the supply stops. These withdrawal symptoms are the surest way of diagnosing morphinism, and can be observed as soon as the effect of the last dose has worn off, i.e. about four to eight hours. They consist of yawning, sneezing and shivering, twitching and restlessness, salivation and flow of tears, diarrhoea and vomiting, sleeplessness, and in severe cases vasomotor collapse. They are preceded by great emotional distress and are often exaggerated by the patient in order to obtain another dose.

Owing to the close supervision of the Home Office morphinism is a rare condition in this country. About one-third of the addicts are physicians and nurses, i.e. those who have comparatively easy access to the drug. The habit sometimes develops after therapeutic administration of morphia for some painful ailment, but so rarely as not to justify withholding morphia because of this danger, as is sometimes done. Most morphine addicts show signs of maladjustment in their previous history and many have been in the habit of taking other drugs before they turned to it.

The habit when established quickly leads to moral deteriora-

The habit when established quickly leads to moral deterioration, as the craving for the drug overcomes all social, legal and moral barriers. Impotence is quickly brought about by morphinism and leads to marital difficulties and neurotic reactions to it.

The diagnosis is based on the history, the physical signs such as pin point pupils; injection marks, abscesses or scars (due to carelessness in aseptic precautions) generally speak for themselves. Development of withdrawal symptom clinches the diagnosis.

Immediate withdrawal is the treatment of choice and tapering off only prolongs the agony. Few patients will, however, stand it and will leave the nursing home or call in another doctor. There is no method of legal reinforcement. Probably the most humane method is to give continuous narcosis for the first few days after the drug has been withdrawn; this should be followed up by a few weeks of modified insulin treatment (page 66) which helps to restore the general condition. Relapse is very frequent, and the chances of permanent cure are very small indeed, unless the patient can be persuaded to remain under supervision for many months. The period of supervision should be made use of to treat the maladjustment, and some guidance or psychotherapy will be required after discharge from hospital.

#### CHAPTER X

# SCHIZOPHRENIA

# (DEMENTIA PRAECOX)

by Bleuler to describe what he held to be the cardinal feature, is now substituted for the older term dementia praccox, which gives an unfortunate and misleading impression; for there is complete agreement that the onset in these psychoses need not necessarily be early (praccox) nor need the outcome be a dementia.

It is now believed that "paranoid states" or "systematised delusional insanities," which are sometimes described separately, should really be regarded as belonging to the schizophrenic group, which is hence sometimes described as the "schizophrenic paranoid series."

The discussion on the definition and delimitation of the schizophrenias is not yet closed. Difficulties arise because some writers use the term schizophrenia as the name of a disease (characterised by certain cardinal symptoms, common heredity, a hypothetical pathological "process" and a common course, resulting in a characteristic personality defect, varying in degree), whilst others apply the term to a clinical syndrome independent of cause, course and possible pathology. It is important to distinguish between schizophrenic symptoms, which may occur in numerous psychiatric conditions, and schizophrenic illnesses. The mere presence of symptoms often loosely called schizophrenic (or catatonic) does not necessarily mean the patient is suffering from schizophrenia.

Clinical Picture.—The clinical symptoms in the various types of schizophrenia are so numerous and various that it is proposed to describe them first and to deal later with their relative diagnostic values and their grouping in different syndromes and types.

Emotional Disturbances.—A schizophrenic illness often starts with unspecific, vague, emotional disturbances. The

patient becomes irritable, over-sensitive or depressed, sometimes in reaction to an upsetting experience, sometimes without any demonstrable external cause. Relatives often say that he has become "more difficult." In other instances. or at a later stage, it becomes apparent that his emotional responses, in particular wherein higher feelings are concerned, are less intense, less warm, shallower; he is less considerate, less polite, less loving. He loses interest in his work, his hobbies, in his friends and relations; he becomes casual, sometimes flippant, often unpredictable in his responses. may become rude, aggressive, suspicious. A mixture of hypersensitivity and detachment may be a very striking feature. The loss of emotional rapport may often be felt by friends and relations before it becomes clearly manifest in the patient's behaviour, and even good observers may find it extremely difficult to describe it in terms of specific illustrations or actual happenings. Even after a psychiatric interview nothing more tangible may be left than the feeling of a glass wall between the patient and the interviewer.

In other instances the patient may be able and willing to give an introspective account of his change and may be pathetically aware of the gradual loss of his emotions. some cases the change is experienced as a loss of feeling in the perception of the outside world: the sunshine has become less bright, the flowers less colourful, people's faces less lively; in psychiatric terms, the syndrome of depersonalisation and derealisation may occur at that stage. In other early cases, and more often in advanced cases, the loss of normal emotional response is disguised by a silly, cheerful indifference. This indifference or fatuousness is often the first demonstrable sign of the typical incongruity and inadequacy of affect (see p. 38) of the fully developed case. This emotional disturbance is easily appreciated if it leads to gross disturbance of behaviour, e.g. if a patient laughs when talking about serious topics, gets violent on trivial provocation, gets dirty, neglects his clothing and fails to be ashamed when his attention is drawn to it; or if he exposes himself, or masturbates in public, as deteriorated cases do.

But in other cases the disturbance is much more subtle, and, in assessing it, one is up against the patient's (and his relatives') tendency to rationalise it, and one has to consider very carefully what emotional reaction would be appropriate in the light of the patient's normal (i.e. pre-morbid) personality. As with many other symptoms, it is the change of his reaction, as seen against his past, that is of real significance.

(Emotional shallowness, progressive apathy, and loss of interest lead to the patient's increasing withdrawal from contact with the outer world, so that he becomes more and more solitary, self-absorbed and frequently hypochondriacal, until finally he appears to live entirely in a world of his own.) Disturbances of emotional expression are closely related to,

Disturbances of emotional expression are closely related to, and are often difficult to distinguish from, inadequate and incongruous emotions. Giggling for no apparent reason, or for an apparently inadequate reason, is often an early anomaly; and in later stages, quite apart from its appropriateness, the expression of emotion may be unusual in itself, stiff, or slow and bizarre, so that the patient's behaviour resembles bad acting.

Disturbances of Volition.—"Lack of energy" is a frequent complaint in the early stages of the illness. Friends and relatives may describe the patient's poverty of initiative, loss of drive, lack of decision and determination. More often such disturbances must be inferred from the description of the patient's behaviour and mode of life. His work history is often the best indicator. A psychopath may frequently change his job because he quarrels with his superiors or workmates, but an early schizophrenic can give no adequate reason for such changes or, if he does, his reasons are illogical or coloured by his abnormal emotional condition. More characteristic still is a gradual downward trend in the type of work the patient is given by his employers. There is often no gross negligence or misconduct, just a very slow falling off of that initiative and spontaneity required in independent and responsible work. This deterioration may be so gradual that nobody can date its onset; it may go on for years until such a patient, without ever having shown more dramatic symptoms, is found sitting about the house doing nothing or ends up as a vagabond, drifting about the world without aim or purpose.

When the loss of initiative and spontaneity becomes more profound, and when it affects more primitive biological functions, it leads to those chronic conditions so frequently





seen in mental hospitals—immobile figures sitting or standing about the wards, often in abnormal postures. The severest form of this disturbance constitutes stupor, *i.e.* complete absence of spontaneous activity, which may be combined with abnormal suggestibility shown in its extreme degree in the so-called automatic obedience (see p. 34).

Ambivalence is the term used for another characteristic schizophrenic feature: contradictory impulses are present simultaneously, or arise in rapid succession. This is often well seen when such patients are asked to shake hands. Thus the patient may begin to hold out his hand and then withdraw it; the examiner then withdraws his hand; whereupon the patient holds his hand out again, only to withdraw it once more when the examiner makes a response. When a request or suggestion is immediately followed by counter-impulses the disturbance is called negativism.

Disturbances of Motor Activity.—The same incongruity may be observed in the various types of schizophrenic activity. A state of apathy may be interrupted by the performance of some sudden impulsive action, so that these patients may suddenly start shouting for no apparent reason, become destructive, or attack others. These sudden outbursts of activity are sometimes carried out in obedience to hallucinatory voices, but in other instances patients who are able and willing to provide information are often unable to give any reason for them.

States of more prolonged excitement are also common; the patients may indulge in strange attitudes, or show peculiar movements, apparently expressive of such states as terror or ecstasy, or they perform wild and purposeless, apparently incomprehensible, movements. The movements themselves are often not performed with the normal degree of precision and co-ordination. Stereotyped repetitions are often seen, such as rocking, knocking, and rubbing. These anomalies of motor activity are often included in a group of symptoms that are called *catatonic* (automatic obedience, echo actions, stereotypy).

If flexibilitas cerea is combined with automatic obedience, the picture of catalepsy results (see p. 33 and Fig. 14).

In mild cases, a lack of gracefulness may be an early sign; and in more advanced cases the movements may become

peculiarly stiff and clumsy and finally result, owing to the addition of tic-like movements and distortions and alterations of the normal tempo, in the so-called mannerisms, which make the whole behaviour appear very eccentric and bizarre. Slight mannerisms may be left as a residual symptom after recovery.

Some patients are very well aware of their disturbance of volition; but in many instances it is projected and rationalised, so that the patients come to believe that others interfere with their decisions and actions, and that their will is under some outside control (passivity feelings). The primary disturbances of volition may be variously elaborated and systematised into delusional ideas according to the strength of the paranoid tendencies. Many catatonic phenomena are explained by patients as due to the actions of voices.

<u>Thought Disorder.</u>—A poverty of ideas and associations may be all that is noticeable at first, but a sense of sudden interruption or blocking in the stream of thought is more characteristic.

The most important characteristic of the type of thought disorder in schizophrenia is seen in the type of the associations nicely described as the "knight's move in thought." In well-advanced cases this becomes evident in the spontaneous utterances, which sound incoherent or entirely incomprehensible, but in milder cases it may come to light only if the patient is given a set problem, such as to explain the meaning of a proverb, or as the result of association tests.

There are many varieties of schizophrenic thought disorder, the results of which differ from the product of mere stupidity to which, however, they may bear superficially a close resemblance. In many instances a sort of stilted or pontifical woolliness in expression is the most prominent feature, which has a certain affinity to what is occasionally observed in religious or demagogic exhortation or exposition, but not occurring in a setting that would make such an explanation justifiable. The consulting-room is not, for example, a normal or appropriate place for manifestations of the kind that might pass muster in the pulpit or on the platform. Thus an early schizophrenic wrote: "Poor people are entitled not only to the benefit of 'Education,' because some of them don't need it, but also to compensation. I don't mean money they have lost, or not made the best of, but

moral compensation as well—to reimburse them for what they have failed to obtain." In other instances the meaning is obscured by the use of symbolic or metaphorical expressions not readily comprehensible to others. Thus another early schizophrenic, when asked for his complaint, replied: "I have feared the numinous from an early age and still do. The stage of trouble from which I am now suffering is such that I do not believe that my fate is governed by the factors that should govern one's fate. . . . The spirit of fear is to some extent a safeguard from normal trouble, since I am governed by the spiritual fear and not reason."

The development of a gnawing anxiety that something may have gone wrong with one's own mind because of an inability to understand what the patient is getting at possesses some diagnostic value in the diagnosis of schizophrenic thought disorder, particularly when it is coupled with a history of impairment in social efficiency or in social relationships and evidence that the method of expression exhibited has not been a life-long characteristic. Conversation with schizophrenics is apt to continue without any progress being made or the elucidation of definite facts, this arising both from the obscurity of expression and from a tendency on the part of the patient to reply in vague, evasive generalities of the "sometime," "maybe," "yes and no," "perhaps" variety; and indeed one young psychiatrist, with memories of mulberry bushes, took a leaf out of the schizophrenic book by inventing the pleasing neologism "morulation" to describe what may frequently be observed.

Again, in certain instances the utterances of schizophrenics may appear not only bizarre but comic as well, with something of the wild precision and logic of the music-hall comedian; yet what may sound like a joke was not meant to be one. This arises from an inability on the part of the patient to separate the abstract from the concrete and to distinguish clearly between metaphors and facts. For example, a schizophrenic girl, when asked why she was turning round in a circle, replied that she felt she was in a knot and was trying to unravel herself; and a schizophrenic sailor seriously maintained that in his opinion, or rather experience, the brain was divided into three parts, second sight for-ard, understanding amidships and memory aft, adding that the top of the mind

should be kept empty in order to have a place to air one's views.

This aspect of schizophrenia doubtless plays an important part in rendering psychiatric patients an object of ridicule, which has done such a grave disservice to the unfortunate sufferers from mental illness. The victims of cancer or blindness are not similarly treated with facetious ridicule.

The schizophrenic thought disturbance may result in "double orientation." Thus, a patient may believe he is God or the King, and may act and speak accordingly. But at the same time he may act and speak as an inmate of a mental hospital and will argue with the doctor and complain about the other patients.

These two lines of thought may be kept up in spite of all contradiction; or they may be interwoven. There is no logic, or the logic is peculiar.

From the subjective point of view schizophrenic patients may, in the early stages, complain of difficulty in concentration. Many such patients turn their attention to subjects that lend themselves to vague speculations such as mysticism and spiritualism, and so-called philosophy and psychology; and this is often interpreted as an over-compensation for their vaguely felt incapacity. But when the thought disorder becomes worse, the patients usually lose insight gradually. The thought disorder colours the various delusional systems, and is one of the main constituents of the so-called schizophrenic dementia.

The elements of language may be well preserved, but various mutilations of individual words may occur, so that the verbal production of these patients may resemble that of an aphasic. In the most severe stages, language is disintegrated into a sequence of incomprehensible syllables and neologisms (word salad) (p. 35).

Early cases often show an inclination for highbrow, odd or artificial expressions (mannerisms of speech), and the newly coined words or neologisms that appear later usually result from the patient's urge to describe his experiences, for which purpose an ordinary vocabulary is inadequate.

Hallucinations of any of the senses may be found; but

Hallucinations of any of the senses may be found; but auditory hallucinations are the most frequent and characteristic (see p. 43). Their clarity varies. Some patients are able to describe the character of the voices in great detail and

the impression may be so vivid that the patient answers hallucinatory questions and discusses the statements of his supposed interlocutors. Other patients, although they are immediately aware of what the voices say, cannot repeat the exact words or otherwise describe the sensory character of their experience. The voices are generally disagreeable, threatening, aggressive, and abusive, and frequently make allusions to sexual matters. Sometimes the voices give orders that are often carried out to the letter, and hence it is always important to determine what hallucinatory orders are received.

The most characteristic type of schizophrenic hallucination occurs when the patient hears his own thoughts repeated, either immediately before he has conceived them (they are "dictated to him"), or simultaneously with the process of thinking, or immediately afterwards ("echo of thoughts"). In later stages the voices become more incoherent and incomprehensible, and neologisms often appear. Voices sometimes develop from obsessional thoughts; these increase in vivid-ness, "as if" they were heard, and finally they are being heard "inside the head" (pseudo-hallucinations) until they are finally experienced as coming from outside.

Visual hallucinations in the strict sense of the word are rare. Disturbances of visual sensation and perception are not so uncommon in early stages of the illness. The vividness of visual perception increases or decreases; faces or objects change shape, appear distorted. True visual hallucinations in acute stages of the illness are sometimes described as small images or pictures flashing through the visual field, pictures often distorted or bizarre. In rare cases of religious-ecstatic excitement the beginning is sometimes marked by one overwhelming vision of Christ or God in His Glory.

"Pareidolic" illusions are not uncommon in last stages of the illness when the patient, withdrawn and autistic, allows his phantasy to play on non-structurised visual ex-periences, and sees faces, people, and monsters in the clouds, wall-surfaces, etc.

Hallucinations of taste and smell are often woven into the delusional ideas, in the production of which tactile or other physical sensations also play an important part.
Hypochondriacal self-concern is a very important and fre-

quent aspect of the patient's introversion. Paraesthesiae

and various pains may be described in detail, and the peculiar sensations are often described at first with the help of strange metaphors: thus, feelings as if the body were twisted or as if the testes were galvanised. But soon the descriptions lose their "as if" character, and the patients then say that their bodies are twisted and that they are galvanised. These hallucinations gradually blend into hypochondriacal delusions, which typically have a very bizarre character.

Schizophrenics very commonly complain of feeling influenced by rays, or complicated physical devices, or of being the victims of all kinds of lewd practices.

The hallucinations lead to all manner of explanatory delusions; but the characteristic schizophrenic delusions are known as "autochthonous" delusional ideas (see p. 35). These "primary delusions" are elaborated, explanations added, and the whole starting-point of the delusional system may be subsequently forgotten. The degree of systematisation and elaboration of the schizophrenic delusions depend to a large extent on the severity of the co-existing thought disorder. Ideas of reference and delusions of persecution are the ones most commonly found, in addition to hypochondriacal delusions. Thus, patients come to believe that others are against them, that their relatives, the police, or the Jews persecute them, until finally everybody is involved in the plot. The passivity feelings (see p. 34) are usually given a paranoid twist, and all the delusional ideas are often confirmed by the hallucinatory experiences. Delusions of grandeur may co-exist with the paranoid delusions, but they may also exist independently. Thus, the patients often believe they are persecuted because they are the possessors of remarkable powers, or because they are the Messiah. Erotic aspirations towards those of superior social status are frequently seen.

Misinterpretations of the most varied kinds, such as of the pictures or advertisements seen in the newspapers, are often quoted to confirm the delusional system.

Many schizophrenic symptoms are illustrated in the artistic productions of the patients. Figs. 15 to 20 give examples illustrating schizophrenic mannerisms in speech and writing, symbolic thinking and paranoid interpretation.

Although for practical purposes it is much more important to distinguish the clinical types, the following entirely

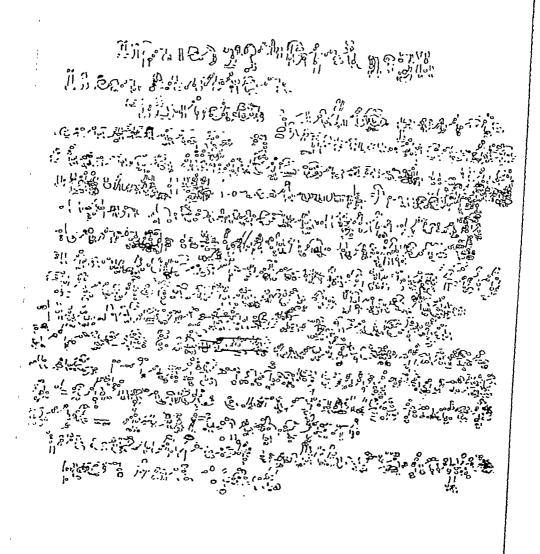


Fig. 15—Schizophrenic mannerism in writing.

# CONVESSIODE CORE.

THIS FINE IS A THEME OF CHIMBERS CILLWAS

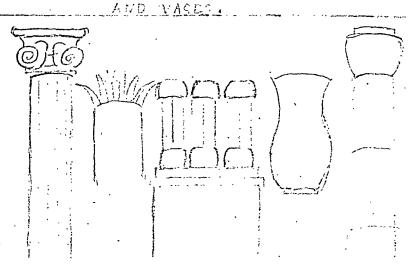


Fig. 16—Schizophrenic neologisms and mannerism.

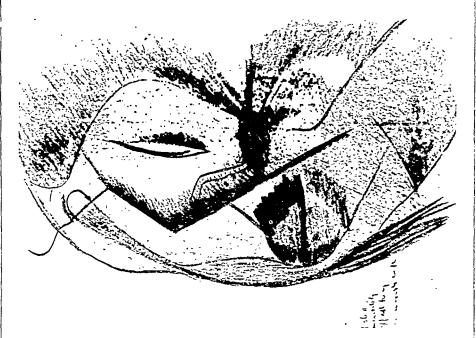


Fig. 17—Schizophrenic drawing.

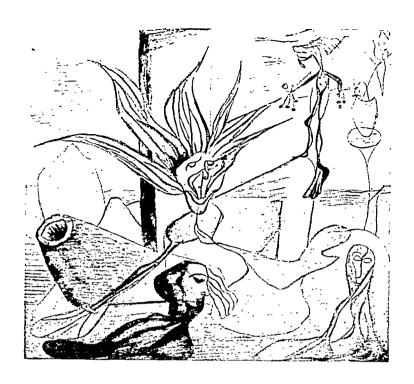
# MEANING of the SWASTIKA

East, is Truth, truth beauty: That is all ye know on Party, rate ye med to know. NORTH GOSTHE SPIRIT. FRANKHES FRAN KNESS EAST. WEST DPEN LOVE GOD THE SOUL ig fom F. Magh he has barns contemplation East becomes West in Rex 4 Jean: RET = RAJ. ing from R. Murge he Cers learns he spirit of Frankness West becomes East Since ig from 3. through love fulls hersal F+L (ellided) = E

Fig. 18—Schematic drawing by paranoid schizophrenic, explaining the meaning of the Swastika.

ich coming from L learns the Spirit of Frust.

East must in COR





Figs. 19 and 20—Symbolic drawings by a schizophrenic.

schematic classification may be useful in remembering the main symptoms:-

- (1) Symptoms of Withdrawal: Introversion, hypochondriasis—emotional and habit deterioration—stupor.
  (2) Symptoms of Splitting: Double orientation—ambivalence—thought disturbances and incongruity of affect impulsive actions.
- (3) Paranoid Symptoms: Projection—hallucinations—delusions.

Clinical Types of Schizophrenia.—Three groups are commonly recognised: (1) Simple—hebephrenic; (2) Catatonic;

monly recognised: (1) Simple—hebephrenic; (2) Catatonic; (3) Paranoid—paraphrenic.

(1) Dementia Simplex—Hebephrenic Group.—Dramatic symptoms are characteristically absent in the early stages of this type, which usually begins in late puberty. The patient shows a falling off of interest and initiative, or a change of his previous interest to philosophical, metaphysical or spiritualistic subjects and the decreasing capacity for adaptation to ordinary life may be disguised in hypochondriacal complaints. Sometimes the hebephrenic process seems to stop at this stage leaving behind an odd process seems to stop at this stage, leaving behind an odd, dry, withdrawn, egocentric hypochondriacal personality as a defect. In other cases the patients show an increasingly poor work record, tend to neglect their personal appearance, and friction arises with other members of the family for no apparent reason. The patients lose their self-criticism and self-control, and become very exacting or even brutal. This behaviour may be difficult to distinguish from the churlishness of adolescence, but usually occurs beyond the age when a reaction of puberty would be a justifiable explanation. With the progress of the illness the withdrawal from reality becomes more marked, the hypochondriasis increases and becomes more bizarre, evidence of thought disorder becomes noticeable, the emotional response becomes more shallow, slightly paranoid ideas and finally hallucinations may develop. These symptoms are often masked by a fatuous euphoria or indifference.

In other cases the onset is more acute, and the picture of

a depressive or an anxiety state may be the first evidence of illness. But after some months hebephrenic deterioration becomes manifest.

(2) Catatonic Group.—These psychoses begin somewhat

later, the majority between the ages of twenty and thirty-five. There is generally an acute onset, and the clinical picture is either that of a stupor or of a state of excitement. The motor symptoms that have been described dominate the picture, and the tendency to sudden impulsive actions makes these patients most dangerous to themselves and those around them. The psychosis may start with an acute state of anxiety or perplexity, with an abundance of hallucinations and autochthonous delusions. Certain cases of catatonic excitement show manic features which may make the diagnosis from manic-depressive psychoses difficult without prolonged observation.

Catatonic psychoses usually subside, but the completeness of the recovery varies, and the type and degree of the residual defect cannot be foretold until the acute symptoms have faded. Recovery may appear to be complete and may last for a considerable period, but ultimately a recurrence usually takes place either in the same form, or in a less acute type of schizophrenia. Recurrent catatonia is a rather characteristic type. Deterioration generally becomes manifest after the second or third attack, as shown by a shallowness of emotion, thought disturbance, or some form of social inadequacy.

thought disturbance, or some form of social inadequacy.

(3) Paranoid Group.—These psychoses are the latest in onset, the majority of them starting in the fourth decade. They develop insidiously. Sensitivity and suspicion gradually develop into paranoid ideas, and the development of hallucinations completes the picture. The delusions are not generally systematised, and various delusions often co-exist without being related or combined. The discrepancy between the grotesque delusions, the terrifying hallucinations and the poor emotional response which they evoke, is often very striking, and this may enable the patient to have some insight into his condition. Thus, he may complain: "I am suffering from ideas of persecution"; and a German paranoid schizophrenic wrote to his physician during the war: "I have been given the Iron Cross. The schizophrenic indifference is appreciated in the front line."

The name <u>paraphrenic</u> has been given to those sufferers from paranoid psychoses who, in spite of numerous hallucinations and more or less systematised delusional ideas, yet retain their personality in a relatively intact state. Thus, the patient may show few symptoms of withdrawal or thought disorder,

and the emotional rapport may remain strikingly good. Paraphrenic psychoses begin later in life than the other paranoid psychoses, often at the time of the climacteric or the beginning of the involutional period. The preservation of the personality may be due either to the fact that the pre-psychotic personality was of a resistant type, or to the late onset, or to both.

These clinical pictures represent well-known types; but they are not separate entities. When a case is observed for a sufficient length of time combinations and permutations can usually be observed: catatonic outbursts in simple hebephrenic or paranoid states; paranoid developments in hebephrenia; and hebephrenic deterioration after a catatonic psychosis. Observations of this kind provide the decisive argument for the close relationship between all the different clinical types of schizophrenia.

Physical Findings and Pathology.—Cyanosis of the extremities, evidence of endocrine dysfunction and various abnormalities of the physical structure are common in all types of schizophrenia. The closest association, however, seems to be between the asthenic habitus and hebephrenic psychoses.

Degeneration of the cells of the testis has been described in a large proportion of schizophrenics, but no other characteristic anatomical findings have been confirmed.

Biochemical abnormalities are equally elusive, except that it would appear that a disturbance of nitrogen excretion accompanies certain well-defined recurrent cases of stupor and catatonic excitement, which enabled Gjessing not only to predict the onset of subsequent attacks, but also to abort them by the administration of thyroxin to increase the nitrogen excretion.

Actiology.—Schizophrenia is a hereditary disease. This is borne out by the comparative frequency in which it occurs in relatives of manifest schizophrenics. By careful study of large numbers of schizophrenic patients and their families, Kallmann found the following rates of expectation: of the children of one schizophrenic parent 16.4 per cent. became schizophrenics; if both parents are schizophrenic, 68.1 per cent. of their children develop the condition; 11.5 per cent. of the brothers and sisters, and 7.6 per cent. of their

half-siblings also develop schizophrenia. This compares with an incidence among the general population of about ·85 per cent. There is still some controversy about the exact mode of inheritance; Kallmann assumes a single factorial, autosomal, probably recessive transmission. Other authorities consider incomplete dominance of the specific gene. At any rate, the penetration power of the hereditary character is below 100 per cent. If one of a pair of uniovular twins is schizophrenic, only 65 to 80 per cent. of the partners develop a manifest illness. This is partly due to hereditary protection of modifying factors, partly to environmental conditions.

The changes during puberty and sexual involution appear to favour the outbreak of schizophrenia at these periods of life. Pregnancy and puerperium are most important additional causal factors. Alcoholic hallucinosis has been interpreted as a schizophrenic state following upon and coloured by the alcoholic intoxication. Schizophrenic pictures may also be provoked by cerebro-vascular and senile changes in the brain.

The importance of psychological factors in precipitating schizophrenia is often very clear, and the course of the illness may often, to a considerable extent, be modified by psychological influences.

Diagnosis and Differential Diagnosis.—The most striking symptoms of schizophrenia do not always possess the highest diagnostic value. Thought disorder and shallowness of emotional response rank first; autochthonous delusional ideas are extremely characteristic; whereas other kinds of delusions, hallucinations and catatonic symptoms are frequent in many other conditions. Yet delusional ideas of a bizarre character, passivity feelings, and especially the complaint by a patient that he hears his own thoughts, are rarely encountered in non-schizophrenic psychoses. So much for the diagnosis from the examination of the patient.

The history and prolonged observation is generally decisive. In order to establish the diagnosis of a progressive schizophrenic illness it is necessary to discover whether the personality of the patient has changed, and if so, whether this change is schizophrenic in character and whether it may or may not be accounted for by environmental or developmental factors. The more extroverted the pre-morbid personality

of the patient, the more noticeable will be a change towards introversion, seclusion and emotional shallowness. On the other hand, it may be impossible to recognise with certainty minor changes in this direction in a schizoid, sensitive, shy, shut-in type of personality. In such patients it may be difficult or impossible, without prolonged observation, to distinguish mild depressions or neurotic reactions from an early schizophrenia.

The presenting symptoms of a recent schizophrenia may closely resemble those of a state of anxiety, depression, or panic; and the diagnosis may be permitted or suggested only with the development of additional symptoms, especially hallucinations and autochthonous delusions.

The diagnosis of a catatonic from a manic excitement is easy in clear-cut cases. But manic features may be present in catatonic states, and then the diagnosis may depend upon the presence or absence of cardinal schizophrenic symptoms. Isolated catatonic features, however, such as stereotypy and grimacing, within a manic picture, must not be regarded as decisive evidence for the diagnosis of schizophrenia. Catatonic symptoms may also result from vascular brain disease. In such cases the discovery of organic signs will decide the diagnosis.

Toxic confusional states may produce pictures very similar to schizophrenic psychoses, but clouding of consciousness is then a marked feature, whereas it occurs only rarely and transiently in the most acute form of schizophrenia.

Prognosis.—The prognosis of the average case coming under treatment is very serious. It is possible that the outlook is more favourable for mild cases which do not come under psychiatric observation. Follow-up studies, conducted ten to twenty years after the first outbreak, show that about two-thirds to three-quarters of the patients are either dead or permanent inmates of mental hospitals. Even after a period as short as three to four years 40 to 50 per cent. are social invalids. After such a period about one-third of the patients can be regarded, for all practical purposes, as cured; the remainder are either improved, though not fully recovered, or run a periodic course, with relapses and remissions. About 35 per cent. of the cases recover or show a considerable improvement after the first attack.

The prognosis in an individual case is a matter of great

difficulty. An old rule, which still holds good, is that the more acute the onset, the better the prospect of a remission. If the onset is insidious, as is usual in cases of hebephrenia, the prognosis is bad. The presence of an adequate precipitating factor, physical or psychological, renders the prognosis better. The prognosis in acute catatonic states is comparatively hopeful, though the possible physical complications of both excitement and stupor (exhaustion, physical damage, aspiration pneumonia) must be remembered. Paranoid pictures tend to progress, but social adaptation may be possible in spite of the continuance of the symptoms.

The patient's age is of importance only so far as it predisposes to particular types of psychoses. A pre-psychotic personality of schizoid type reacts unfavourably on the outlook, as does a schizophrenic heredity, whereas manic-depressive psychoses in the family may point to a remittent course. The prognosis for patients of asthenic build is less favourable than for those with pyknic or athletic physique. The latter (mesomorphism) seems to be genetically linked with the protective factors mentioned before (see p. 156). Signs of endocrine dysfunction are prognostically unfavourable.

Treatment.—As regards treatment, the patients may be divided into two classes: those in and those outside mental hospitals. Again, in mental hospitals, the acute and chronic cases require different treatment. For advice as to general management, reference may be made to the general section on treatment, p. 62. Chronic cases benefit most by occupational therapy. Wherever this is carried out by up-to-date methods the mute and stiff catatonics who were previously so common are not to be seen. With carefully thought out treatment and management it is possible to bring these patients back to some sort of community life.

In cases of acute excitement continuous narcosis is the method of choice. It prevents the patient from exhausting or damaging himself and is often followed by an improvement in behaviour even if other symptoms continue.

The treatment of schizophrenia has been revolutionised by the introduction of shock therapy. The shock treatment is of two types, insulin shock therapy and convulsive treatments of various descriptions.

The insulin shock treatment consists in producing a series

of hypoglycaemic states and interrupting them after varying periods by oral or intravenous administration of glucose. The intensity of the hypoglycaemia is gradually increased up to deep coma. The treatment is given six days a week until a course of thirty to sixty comas has been completed.

Insulin shock treatment can only be carried out in hospital, since a specially trained nursing staff, experienced in the technique, is essential and an acute, if transient, phase of the

psychosis may be precipitated.

Convulsive treatment consists in the production of epileptic fits twice or three times a week. This can be done by the intravenous injection of convulsant drugs (cardiazol, azoman), or by electrical stimulation of the brain through the skull. The more recently introduced electrical method (E.C.T.) is technically the simplest and least unpleasant for the patient, so that the production of convulsions by drugs has practically become obsolete. Disturbances of memory, usually not severe and of a transient character, have been reported after both forms of treatment, and fractures of bones, particularly after E.C.T. E.C.T. can be given to out-patients, but great care must be exercised in the selection of patients before doing so.

The assessment of the results of new methods of treatment in schizophrenia is rendered extremely difficult because of the great variation in the spontaneous remission rate, the difficulty being analogous in some ways to that of assessing a new treatment of disseminated sclerosis. The relative value of the two methods of treatment, insulin shock and E.C.T., is still under discussion. Evidence is accumulating, however, that insulin treatment leads to more frequent, better and more lasting remissions than occur either spontaneously or with the aid of E.C.T., the latter form of treatment being increasingly regarded as effecting symptomatic improvement by the removal of certain symptoms, rather than as having a more direct effect upon the course of the illness as a whole. E.C.T. would seem to have particular value when affective complications cloud the picture or in cutting short a stuporous phase or excited phase.

Nevertheless, a recovery rate of over 50 per cent. has been claimed for both methods of treatment in cases of less than one year's duration. In acute cases the remission rate with insulin treatment would seem to be between one-and-a-half

to three times that obtained with routine methods or with E.C.T. alone.

It may be concluded that insulin treatment should always be given in cases of recent origin and should be considered even in chronic cases. All workers emphasise that in order to be fully effective insulin treatment must be combined with psychotherapy and psychological management, and many workers find that a mixture of insulin with E.C.T. is the most effective. Quite apart from the better remission rate obtained more rapidly, the better quality of the remission is one of the most striking effects of insulin therapy, the patients showing a degree of liveliness in their affective response, a greater degree of spontaneity and a better initiative and insight than occurs without it.

As has previously been mentioned (p. 69), pre-frontal leucotomy has not only a real place in the treatment of noisy, aggressive and destructive schizophrenics in making them happier and easier nursing problems, but has enabled a number of longstanding cases of schizophrenia who have not responded to other methods of treatment to leave hospital and to lead a life outside it not infrequently with a considerable degree of success.

Early cases, without acute symptoms necessitating admission to a mental hospital, may benefit from environmental treatment, such as change of surroundings and removal of factors which tend to produce sensitivity, hypochondriacal or paranoid ideas. In more advanced cases of the hebephrenic type, and in cases of schizophrenic defect, the main object of treatment is the patient's readjustment to social life. Nothing gives such relief to a patient as freeing him from the stress of an occupation which he can no longer manage, and putting him to a simple task, in which he may once more become a useful member of the community. The longer an attack lasts beyond six months the less likely is recovery.

Appendix. — Paranoia and (non-schizophrenic) paranoid reactions.

The large literature on the subject of paranoia is quite out of proportion to the extremely rare occurrence of the clinical condition. Kraepelin described as paranoia the insidious development of a delusion system, growing by logical steps, but leaving the personality as such intact. Paranoiaes are

generally unusual personality types to begin with, and the origin of the psychosis is largely endogenous, though it is often related to a traumatic experience. No hallucinations occur, though misinterpretations and retrospective falsifications of memory to fit facts into the delusional system are common. The course is progressive and very chronic. The delusions are, as a rule, of the persecutory kind, often turning into delusions of grandeur. Delusions of being descended from high persons, or being loved and persecuted by some famous person, have also been described.

Some paranoiaes live in liberty as queer inventors, founders of eccentric sects, or as apostles of peculiar social reforms; but the majority are ultimately admitted to mental hospitals because of some friction with society.

It should be noted that some authors, in particular the psycho-analytic school, use the term paranoia synonymously with paraphrenia (see p. 154).

Long-term follow-up of carefully studied cases has shown that some take a deleterious course, leading to a more or less marked personality defect. In others it appears likely that the abnormal personality which is the soil of the paranoic system, is itself the result of an abortive schizophrenic illness.

Owing to their well-preserved personality, their firm belief in their delusion, and the logic of their reasoning, paranoiacs are often capable of convincing others of the righteousness of their cause. Persons in close relation to them—husbands, wives or children—are then liable to develop similar delusional beliefs: e.g., Folie à deux; but more than two are often involved and whole paranoic communities have been described.

Fleeting paranoid reactions to traumatic events are not uncommon in sensitive, suspicious, resentful and emotionally over-responsive personalities. As a rule, such psychogenic reactions—understandable in the light of personality and the significance of the event for the person in question—yield easily to explanation or conviction by facts. But many transitions exist between such conditions and those forms of progressive paranoia which develop from a traumatic life-experience.

Some paranoid reactions developing in prison, and certain abnormal re-actions, to litigation and compensation procedures, come into this intermediate group.

#### CHAPTER XI

## THE AFFECTIVE REACTION TYPES

NCREASING experience no longer permits of the clear-cut division into manic depressive psychoses and neuroses (with special reference to other types of depression and anxiety states) that was formerly deemed to be possible. A growing tendency may thus be observed to include under the general heading of affective reaction types those cases whose main features have been described as consisting in "swings of mood, or abnormal mental and physical reactions to emotions, or both combined."

Affective syndromes comprise a very large, and hence a very important, group of psychiatric disorders; but their presentation is a matter of some difficulty. One of the main sources of this difficulty has been the differentiation of what, it must be emphasised, is the relatively small group of classical manic depressive psychoses with the aid of certain broad criteria, such as an endogenous origin with persistent abnormality of mood as a central feature, and a good outcome of self-limited duration, the course run being mainly independent of environmental factors. This differentiation was then followed by the attempted fathering of the opposite characteristics on the very much larger segment of the affective group as a whole after the classical manic depressive cases had been subtracted from it, these cases exhibiting a psychogenic, as opposed to a constitutional origin, the abnormality of mood being less persistent and secondary rather than a central feature, and the course run being much more modifiable by environmental influences and in particular by psychotherapy. The differentiation was justified on the grounds of the therapeutic implications, no active treatment being considered possible for the manic depressive group (before the introduction of Convulsion Therapy), which would, nevertheless, recover spontaneously in the course of time; whereas the neurotic group responded to psychotherapy and, it was

even claimed by certain authorities, would not get well without it.

Clinical experience demonstrated, however, that according to the above scheme the number of cases of pure lineage was greatly exceeded by the number of bastards; but the attempt to fit cases into one or other of the two contrasted types persisted to the confusion of the student and the irritation of the tidy minded when, as frequently happened, the facts did not fit the hypothesis.

The criteria commonly put forward to differentiate between the two contrasted categories do indicate important problems in any given case. Even should it be possible, however, to answer all these questions, a clear-cut distinction between a classical manic depressive psychosis and its opposite, an allegedly typical neurosis, would not necessarily be achieved. In brief, a continuous series may be observed; and whilst the extreme ends of this series certainly differ widely, to say that black differs from white does not imply a denial of the possibility of a wide band of grey in between. And in practice a very large number of cases lie in the intermediate zone.

Affective syndromes have often been classified either (1) according to the predominant mood or affect that is shown, e.g. elation or depression or anxiety, or (2) in terms of the relative importance of the endogenous or reactive (exogenous) element in their production. But, with the exception of the small classical manic depressive group, which does combine a persistent abnormality of mood with an essentially endogenous origin, there is an indifferent degree of correspondence in the results obtained by the two methods; and in both these possible methods of approach due attention should also be paid to (3) the underlying type of personality that is afflicted and the important effect this has on the clinical picture and the final outcome.

In brief, the affective syndromes can be regarded as reactions dependent upon every conceivable combination of constitutional predisposition and stress, both physical and mental. It is also convenient to regard affective symptoms as being in themselves *impersonal* symptoms, outside the patient's control, and evidence of the reaction of the total personality in both its mental and physical components. Moreover, once an affective reaction has been started, the

symptoms tend to acquire a certain autonomy of their own and to persist for a variable period. It is true that affective reactions are often precipitated by psychological factors; but they should not be regarded as essentially psychogenic disorders in the same way that hysterical reactions should be regarded as psychogenic disorders. The degree to which, for example, psychogenic determinants, such as the escape-into-illness motif, are important depends upon aspects of the total make-up of the individual other than those that necessarily predispose to an affective illness, although both constituents may be and often are combined in the same person. Thus an individual may be extremely susceptible and readily develop severe anxiety symptoms, but may carry on; whilst another individual, far less susceptible to this type of reaction, may readily succumb, give up work and report sick.

It is important to try and separate more purely affective symptoms from secondary and psychogenic elaborations and complications that can be attributed to the type and toughness of the personality that is afflicted. The longer an illness lasts the more liable are these secondary elaborations to occur until finally they may come to dominate the picture.

A start will be made by describing the classical manic depressive psychoses, not because of their frequency, for as has previously been pointed out classical cases of this disorder form a small proportion of the affective group as a whole, but because it is valuable for the student to try and form a clear concept of what constitute endogenous symptoms. As a working rule it can be taken that, in so far as the symptoms shown in a case approximate to those of a classical manic depressive syndrome, so must increasing allowance be made for (a) a constitutional or endogenous origin; (b) the possibility of the development of an illness of certifiable intensity; and (c) a course or duration that, at least until the discovery of convulsion therapy, although individually variable, was relatively

fluences.

Whilst it is obviously necessary for teaching and classifica-tion to describe the affective reactions under the various headings, it must be realised that transitional or mixed states not only can be found but occur frequently.

#### CLASSICAL MANIC-DEPRESSIVE PSYCHOSES

According to the definition put forward by Kraepelin, manic depressive psychosis is a mental illness characterised by mood swings and concomitant disturbances of will and thought. Though the prognosis is good and recovery complete, there is a marked tendency to relapse.

Manic and depressive psychoses are grouped together because (1) they may alternate in the same case; (2) some of the striking symptoms may be regarded as exact opposites. The symptoms of manic-depressive psychoses are both physical and mental and are given in tabular form below:—

# Depressive States

- (1) Sadness.
- (2) Motor retardation up to stupor.
- (3) Retarded thinking.
- (4) Delusions of self-reproach, depersonalisation, hypochondriasis.
- (5) Suicidal ideas.
- (6) Loss of sexual desire.
- (7) Sallow complexion.

# Manic States

- (1) Elation.
- (2) Hyperactivity.
- (3) Flight of ideas.
- (4) Delusions of grandeur, mental and physical.
- (5) Aggression.
- (6) Increased sexual desire.
- (7) Ruddy complexion.

Loss of weight, constipation, insomnia and frequently amenorrhoea are found in both manic and depressive states.

Mania.—The onset is usually gradual, unless it follows a depressive phase, when the change can be very sudden. The dominating affect is elation. The patients are active and full of life, seem gay and cheerful, and state they feel better than ever before. But they are usually irritable as well and this may be one of the most prominent features throughout. In particular, an argumentative irritability may frequently be observed, so that attempts to make the patient adopt a more reasonable attitude are countered by bargaining. Sleeplessness and irritability are often the first symptoms. These emotional changes are coupled with overactivity. The patients start to do more, undertake larger enterprises and indulge in greater risks. The increasing number of these new enterprises tends to make it difficult for any one of them to be completed,

so that finally, in severe cases, activity becomes disconnected and appears purposeless. But even in mild cases impulses follow one another in rapid succession. The manic patient is also highly intolerant of interference or restriction which, when encountered, may provoke aggressive or even violent reactions, often with a paranoid colouring. This may go on to paranoid delusional formations, particularly when the excitement is not too intense. The differentiation from paranoid states may then be difficult.

Flight of ideas, as opposed to retardation, is the characteristic disturbance of thinking. In severe cases the patients may talk, shout or sing incessantly. Jokes and rhymes, but also angry complaints, accompanied by vivid and expressive movements, are poured forth. Manic patients are very distractible and tend to weave anything they see or hear into their utterances. Grandiose ideas may be developed, but they are usually changeable and are put forward in a jocular vein. Hallucinations are rare even in severe cases and, if present, are in keeping with the grandiose ideas and elated mood. Some make hypochondriacal complaints, but utter them with manic vigour. The increased sexual desire and lack of inhibition may result in grave difficulties. Manics may for a time present the picture of perfect health; but they tend to neglect their meals and to wear themselves out, so that signs of exhaustion and starvation may rapidly develop.

Hypomania shows the same symptoms as mania, but in a milder degree. It is therefore more difficult to recognise and it is often hard to convince a lay person or judge that the cheerfulness, overactivity, lack of control and argumentative irritability are evidence of a morbid condition, particularly when there is no history of a previous attack. Hypomanics can often pull themselves together for a short time, so that an erroneous impression can easily be derived from a brief interview.

It is well to remember that states of manic excitement are typically deficient in insight not only during the illness but after it. And since they are apt to be extremely trying to deal with, the patience of those around them readily becomes exhausted and may lead to regrettable remarks or actions. Such remarks or actions will be remembered in detail and may form the basis of subsequent complaints of ill-treatment.

It is therefore necessary to treat all manic states with great circumspection and to warn friends and relations of the complaints and difficulties that may arise owing to the failure to regain insight when recovery may otherwise seem complete.

The depressive phase of manic depressive psychoses (melancholia) usually begins and ends gradually. The patient feels sad or listless or apathetic. The typical affect is that of sadness, but has been described as being qualitatively as well as quantitatively different to that normally experienced, this difference having as an ingredient a sense of painful deprivation or loss. Thus a patient with a mild endogenous depression said spontaneously: "I feel that I'm different from other people, that they have got something that I haven't; I'm different from what I used to be and I have lost something that I once had." The typical depressive mood thus shades into depersonalisation (p. 45) in which the patient feels changed-strange, lifeless, detached, automatic. Sometimes, instead of feeling that they themselves have changed, the patients lay emphasis on a change in the outer world which seems dead or macabre: "The whole world is like a big charcoal sketch, something I can't get at" (derealisation). In "affective loss," which is typical and common, the complaint centres round the loss of feeling: "My heart feels as if it had been eclipsed." This is often given a self-reproachful twist, e.g. the patient complains of feeling "hard-hearted." All transitions and variations of these emotional states may be observed.

The melancholic mood colours the whole outlook on life—past, present and future—pessimistically. Melancholic patients are typically inclined to blame themselves for their condition, and feelings of guilt ranging from a sense of ineptitude to definite self-reproach are most characteristic features. The patients look into their past and there find cause for regret and self-blame. Falsifications of memory along these lines are not infrequent. The self-reproachful ideas generally follow the popular views of moral and medical causation and thus the illness is attributed to masturbation or lack of consideration and love or some other sin, real or imaginary.

Paranoid delusions are often developed from the self-reproach, so that the melancholic comes to believe that others

look at him and indicate his unworthiness by word, look, or gesture (ideas of reference). He may feel this supposed behaviour on the part of others to be thoroughly deserved, or partially deserved but overdone, or only slightly, if at all, deserved and grossly overdone. The paranoid ideas, when present, are consistent with the mood and appear comprehensible in the light of the patient's attitude and outlook. Obsessional features may develop, even when the patient had none before the illness. Hallucinations are exceptional and should in the younger age groups raise suspicion of complication by drug intoxication or of the correctness of the diagnosis. Hallucinations are, however, more common in involutional melancholia (q.v.) (p. 171).

A cardinal symptom of classical melancholia is retardation. In the early stages of development, and in milder cases throughout, the retardation may only be noticeable to the patients themselves, who find that every thought, word, movement or decision requires a greater effort than normally. This is typically put forward as evidence of lack of will-power rather than as an excuse for indecision and inaction. If, however, the retardation becomes more marked, the slowness becomes apparent to the outside observer and is associated with a mask-like or frozen facial expression that may, erroneously give the impression of a somewhat passive inertia. In the most severe forms a condition of melancholic stupor may result, but a condition of profound stupor with little or no response is rare and in youthful patients is usually due to schizophrenia.

A state of indecision is frequently associated with retardation and may be regarded as one manifestation of it. The indecision is often combined with an importunate seeking for advice, that then argues about its wisdom and does not issue into action. A characteristic experience for the psychiatrist is to have considerable difficulty in terminating an interview, during which the patient may have really said very little, apparent success being rapidly followed by a tap on the door, an apologetic request for one word more and a further conversation that is equally unproductive.

Melancholic patients tend to turn their fears about their

Melancholic patients tend to turn their fears about their health, their economic condition and their prospects (as well as those of their loved ones) into facts, and particularly when getting on in years may come to believe that they are financially ruined, or that their families are starving, sick or even dead. This may go on to nihilistic ideas (p. 37) that they themselves are dead or that the world does not exist; but these nihilistic ideas may also originate from the hypochondriacal preoccupations that are very common in melancholics. These hypochondriacal preoccupations assume an increasing prominence in the older age groups. Such patients may complain that their organs do not work, that their stomach cannot digest food, that their bowels are blocked, that their heart does not beat, that their genital organs are decayed.

It is not uncommon for endogenous depressions of all ages to feel worse in the morning and to improve somewhat towards the evening. This morning—evening variation is often connected with the poor sleep; but patients may feel worse after a good night. The insomnia of melancholia is characteristic in that the difficulty is not so much in getting off to sleep as in waking up early. Sexual desire is diminished or absent and impotence is frequent in the early stages, which may lead to hypochondriacal and self-reproachful elaboration. Loss of weight is another very characteristic feature: patients look sallow and ill, and older than their years. The pores of the skin become more prominent. The hair loses its lustre. Other physical findings are of less importance. The blood pressure tends to be somewhat higher than is normal for the individual and nearly all severe melancholics complain of constipation, which is also a source of hypochondriacal concern.

Suicide.—Every melancholic patient must be regarded as a suicidal risk and a substantial number of patients are admitted to hospital after suicidal attempts. Patients may plan suicide carefully and dissimulate their intentions. Whilst in hospital, strangling, hanging and jumping out of the window are the favourite methods, whilst at home patients frequently try to gas themselves or to swallow poisons. A morbid fear for the future of their dependents sometimes leads to well-intentioned homicide before a suicidal attempt, and this may lead to a very tragic situation if the shock of the homicide prevents the intention of suicide being carried into effect. Some patients improve temporarily after an unsuccessful suicidal attempt.

Suicide would probably be more frequent in melancholic patients were it not for that other cardinal symptom which has been mentioned, namely retardation, which has a somewhat antagonistic effect. It may be observed here that retardation cannot be regarded as a simple accompaniment of the depressive mood, for the retardation and depression may vary independently of one another and, not infrequently, retardation improves before the depression. This explains why the risk of suicide is especially great during the period of recovery, even greater than at the height of the illness.

Cyclothymia.—The term cyclothymia is often applied to patients who show mood swings of minor intensity. Closer investigation in these cases may disclose phases of insomnia and a certain amount of retardation, with or without manifest depression, or, alternatively, minor circumscribed attacks of elation and overactivity, neither of which were regarded as illnesses at all.

It is most important to bear in mind the possibility of these minor attacks. In particular, mild forms of melancholia may be disguised as "organ neuroses," i.e. vague complaints of indigestion, constipation and praecordial sensations may be the most conspicuous features.

Anxiety is also frequently combined with endogenous depressions, and not only mild cases may complain of pressure on the head, praecordial sensations and a sense of oppression in the chest and abdomen.

### ALLIED STATES

Symptoms may appear in different combinations from those seen in classical melancholia and mania. The existence of these intermediate or mixed forms is shown very convincingly in manic stupor. In this extremely rare condition patients may exhibit a most striking lack of manifest activity; but after recovery may describe their euphoria and flight of ideas which they were unable to express owing to their extreme motor retardation.

In the previous section, a description has been attempted of classical endogenous melancholia, or as it is often called, depression with retardation, with the characteristic physical symptoms of loss of weight, sleep, appetite, sexual desire,

and frequently constipation and amenorrhoea, and the mental symptoms of a depressive mood with special qualities, retardation with its associated indecision, self-reproach, ideas of reference and various hypochondriacal and paranoid elaborations, the latter particularly in the older age groups.

It was, however, emphasised that classical cases of endogenous melancholia, or depressions with retardation, were relatively rare. The majority of depressions fall rather into the group of mixed states, the retardation being less prominent or absent, whilst anxiety and agitation are more to the fore. These mixed states have great practical importance because of their frequency.

Involutional Melancholia is often diagnosed (a) if the illness starts about the involutional period; and (b) if the patient has never previously suffered from a manic or depressive phase.

The patients are tense, anxious and fearful rather than sad. In severe cases, extreme restlessness and agitation, with much sobbing, wringing of hands, and incessant complaint and lamentation may be observed. Owing to their lack of retardation, these patients can be dangerously suicidal.

The characteristic involutional features are hypochondriacal ideas often of a bizarre character, a preoccupation with the theme of mortality or death, an increased concern over money that may go on to delusions of poverty, and various paranoid reactions and paranoid delusional ideas. Other depressive symptoms or depressive delusions (e.g. self-reproach) may be present as well. Auditory hallucinations are not infrequent.

The picture seen may, however, be lacking in drama and is not infrequently that of a chronic and somewhat petulant misery with indecision, inertia and hypochondriacal self-concern.

Other Common Depressions.—Relative or complete absence of retardation is also often regarded as one of the most characteristic features of exogenous or reactive depression; but the difference between exogenous or endogenous depressions on this point, as in all other respects, is one only of degree.

The symptoms in a typical exogenous depression follow immediately upon some event which makes the reaction comprehensible in the light of the patient's personality and circumstances, the abnormality in the emotional reaction

consisting in its intensity and duration. Throughout the illness the patient is primarily concerned with this causative event or situation and its possible consequences. The subjective quality of the mood differs from an endogenous depression in that the experience is not so much one of loss as of load. Again, the self-reproach, when present, is not so much an expression of a basic sense of wickedness or sin as an expression of regret over mistakes, the patient, so to speak, kicking himself for his folly. The causes for selfreproach therefore tend to be more justified or realistic, even if exaggerated, and it would be a mistake to suppose that they are not necessarily sincere. Thus the patient will brood over how his present condition came about or might have been prevented. He may blame himself, but more typically he blames others, for sins of omission and commission. A characteristic attitude is, "I expect I should blame myself, but . . ." leaving little doubt where the emphasis is laid.

The absence of retardation also permits of a more lively play of facial expression. Profuse weeping with plentiful tears is not uncommon; whereas tears are more rarely seen in classical melancholia, and when they do occur may be allowed to trickle down the face of frozen misery without being wiped away.

Finally, and this has often been stressed as a crucial issue, an improvement in the external situation leads to a more rapid recovery than in endogenous conditions and the patient shows in general a better reactivity to environmental circumstances.

Few patients fulfil all these criteria for an exogenous depression, and the number is further reduced if the latent fallacy of a spurious psychogenesis (p. 11) is borne in mind. Thus, a picture frequently seen is that of an individual who is persistently depressed as the apparent result of a concatenation of unfortunate events, who is not outwardly greatly retarded but who expresses considerable difficulty in taking decisions, who shows in addition many of the biological concomitants of depression, some self-reproach on a moderately realistic basis, perhaps some self-consciousness that might plausibly be interpreted as mild ideas of reference and a good deal of reactivity to environmental factors. In brief, depressive symptoms may be found grouped in every possible com-

bination and perhaps the central issue that aids in the diagnosis of an affective reaction of this type is the determination of persistent affective disturbance, which, like the ability to know when a patient is ill, is largely a question of experience that cannot easily be put into words. A period of observation is often essential before a correct diagnosis can be made, in order to determine how much the patient's behaviour is persistently affected. Finally, depressive states are often considerably complicated by the presence of anxiety symptoms, to be described later, and by hysterical features as well.

Actiology.—The importance of the constitutional factor is demonstrated in the heredity, in the patients' physique and in their premorbid personality.

For reasons previously put forward (p. 27) studies in heredity are difficult to make in psychiatry, but those having their origin in indubitable cases of manic depressive psychoses suggest that the manic depressive constitution is probably due to a single dominant gene, although only 20 to 30 per cent. of the carriers develop the illness. The figures regarding the liability of the various relations to be affected are 9.5 per cent. for the children and 2.5 per cent. for the nephews, nieces and first cousins, the figures for the general population being given as between 0.2 and 0.4 per cent.

Mention has already been made (p. 30) of the frequency with which classical manic depressive psychoses tend to occur in those with a pyknic physique. The previous personality of these classical cases is frequently of the *syntonic* variety, by which is meant that their emotional reaction to external situations is both warm and appropriate. Syntonic individuals possess at best a rich, full-toned temperament kept under good control, and such individuals are often described by those who know them as the last people they would expect to have a nervous breakdown.

It must not, however, be supposed that all sufferers from manic depressive illnesses are of this type, for many sufferers are of a chronically depressive or anxious temperament and a considerable number are of an unstable or neurotic disposition. A number are frankly cyclothymic. An important point is that there is no direct or necessary relationship between manic depressive psychosis and a neurotic type of personality.

Manic depressive psychoses are much more frequent in women than in men. The climacteric is an important precipitating factor. A certain number of cases also develop after childbirth; but it is now recognised that there is no specific puerperal insanity and that breakdowns occurring at this time may be of any type.

In other cases the onset occurs after infections, especially influenza. Arteriosclerotic changes can possess importance in the older age groups.

The physique in the reactive depressions and involutional melancholias is more often athletic or asthenic rather than pyknic and the previous personality more frequently of an anxious, rigid type with conscientiousness or even obsessional features, the personality being deficient in resilience and plasticity. Neurotic and vulnerable (p. 88) personalities may much more frequently be observed. Physical factors, such as influenza, may also possess great importance as precipitants.

Whilst melancholias of endogenous origin may occur for no apparent external reason, there can be no doubt about the importance of psychological factors and experiences in precipitating manic depressive illness or the various more reactive depressions in many instances. Manic states appear to be less directly connected with external events. The psychological precipitants may be of the most diverse types; but broken love affairs and bereavements are particularly prominent in endogenous depressions, whilst other more varied factors less intimately concerned with the intimate personal life, such as professional disappointments and "disgrace with fortune or men's eyes" appear more important in the more reactive states.

Course and Prognosis.—Cases of classical recurrent endogenous depression usually start between the 25th and 40th year. Depressive states are more frequent than manic and in more than two-thirds the first attack is a depression. Two-thirds of the cases recover completely, the remaining third swinging over into the opposite phase before recovery. The prognosis is good for the individual attack, but recurrence is probable. Advanced age, arteriosclerotic features or atypical (schizophrenic) psychoses in the family should all lead to greater prognostic reserve. The symptom of retardation has the highest correlation with a good prognosis.

It must not, however, be supposed that because an individual has once developed the illness he is necessarily doomed to repeated attacks; a considerable number have only one clear-cut illness in their lives. It is impossible to predict what intervals will elapse between attacks in those who do suffer from recurrent illnesses, but the duration of the previous attack gives a fair indication of the probable duration of a succeeding one. As a rule, the attacks last between six and eight months, but attacks of two or three weeks' duration may occur as well as those that last two or three years, there being enormous individual variation in these respects. Objective evidence of improvement often precedes the patient's admission of it.

The classical endogenous cases appear well in the intervals, although mild hypomanic features may be noticed by relations after depressive illnesses or some moroseness after a manic state.

Not all classical manic depressive states issue in complete recovery; a considerable number do not do so and the surprising thing is perhaps that so many do. It is surely a tribute to the stability and resilience of a personality that it should be able to stand recurrent severe and long-lasting illnesses of any type without ill effect; and it is therefore not at all surprising that many manic depressive states do show evidence of hospitalisation or secondary reactions of a neurotic type as many of them do.

The prognosis for the more reactive depressions is much more variable and is more dependent upon environmental influences; yet it should be borne in mind that all affective illnesses tend to be self-limiting diseases, although after the affective symptoms fade, these illnesses are apt to be prolonged by the operation of secondary complications of psychogenic origin. These will depend upon the special circumstances and the patient's personality. The prognosis is always more serious if the first attack occurs at the involutional period. As has been pointed out, the course and duration of an exogenous ("neurotic") depression are more closely related to the event or situation which is responsible for its production. It must, however, be remembered that both manic and melancholic states of endogenous type may be precipitated by emotional shock or stress, and the subsequent illness may

last as long as did previous attacks which were not so precipitated. The characteristic feature of these endogenous illnesses, precipitated by psychological factors, is that the content tends to lose connection with the precipitating event. These points must, however, be taken as guiding principles rather than as rigid rules, for even in the most endogenous cases the content of the depression must necessarily be determined to a considerable extent by the patient's past experience and circumstances; and even when a depression appears psychologically comprehensible as a reaction to some external event, the type of the patient's response is affected by constitutional factors. It is therefore necessary to study each case individually before the relative importance of constitutional and environmental factors, and their bearing on the prognosis, can be assessed.

Differential Diagnosis.—The differential diagnosis between the various types of depression depends upon the assessment of the relative importance of endogenous and environmental features in their production. Hysterical and obsessional features are not inconsistent with a diagnosis of depression but, as has been indicated above, they are of great importance for the prognosis in the individual case.

Affective features may disguise the early stages of schizophrenia, particularly when retardation is present, and it is often difficult to distinguish between retardation and schizophrenic anergia. Hypochondriacal and paranoid ideas, if in keeping with the affective state, also do not preclude the diagnosis but should suggest schizophrenia if they become bizarre or incomprehensible in the light of the prevailing mood. This is particularly true for hypochondriacal ideas of gross physical changes when seen in young individuals. Again, shallowness of affect should rouse the suspicion of schizophrenia. Demonstrative statements of being depressed may be part of a hysterical reaction, yet it must be borne in mind that persistently depressed individuals may also be hysterical in their behaviour, and in such cases evidence should be sought as to whether persistent abnormality of mood exists as well.

Depressive pictures may also occur in organic conditions such as general paralysis. High blood pressure or evidence of arterial thickening should suggest the possible rôle of vascular disease and it is often very difficult in these cases to demonstrate the existence of an organic dementia if much retardation exists.

Manic states need to be distinguished from catatonic excitement; a euphoric mood, especially if it is warm and infectious, contact with the surroundings and distractibility are in favour of the former diagnosis, whereas the exhibition of stereotypy, mannerisms and negativism are characteristic of schizophrenia. As with depressive pictures, the possibility of organic conditions, such as general paralysis, must be borne in mind.

Treatment.—Any physical factors must, of course, be dealt with in so far as it is possible. The general principles of management, psychological treatment and psychotherapy have been dealt with elsewhere (p. 70). All depressive patients require reassurance and usually obtain transient symptomatic relief. Mild cases may respond extremely well to it and many melancholics, after recovery, bear witness that the kindness and reassurance they received were of the greatest help to them.

Any intensive psychotherapy which includes a thorough psychological investigation of the patient's problems should usually be postponed until the affective state of the patient fits him to receive it. A great deal of harm can be done by probing into the problems of patients so long as they continue to be deeply depressed. As a general rule it can be said, however, that the more reactive the case the more is psychotherapy indicated that includes a thorough psychological investigation of the patient's problems and their reformulation with a view to helping his readjustment. When much agitation and anxiety are present a course of intensive narcosis should be considered.

Previous reference (see p. 68) has been made to the revolutionary value of E.C.T. in the treatment of depressions. The main indications are depressions of endogenous type or with endogenous features, particularly in the older age groups. Quite apart from the months of illness and misery that may be avoided by the administration of E.C.T., the danger of secondary symptom formation and elaboration may also be reduced. E.C.T. seems to have less value in cutting short the duration of manic attacks, but certainly can often make

such patients easier to manage. As has also been mentione (see p. 69), prefrontal leucotomy has a most valuable place in the treatment of chronic depressions who have no responded or have failed to maintain improvement after treatment by E.C.T., but it should never be performed unt the patient has had the benefit of other methods of treatment first and until there is good reason to suppose that the illness is of a chronic type.

#### ANXIETY STATES

Anxiety is a symptom that may occur in any psychiatric syndrome. As has been seen, anxiety should, for example, it regarded as an integral part of many depressive reactions and indeed it is often a matter of taste as to whether a cas should be regarded as a depressive state with anxiety feature or vice versa. In many affective conditions, however, a anxiety syndrome may be observed in more or less pur culture. Difficulties arise because frequently this may only be true for a time, since secondary elaborations, often of hysterical type, tend to complicate the picture either immediately or after a variable but usually brief period.

All human emotions are accompanied by physiologic changes. As Cannon has pointed out, the emotion of fear associated with physiological changes that represent pr paration for action. This condition of heightened responsiv ness and preparedness may be regarded as a normal ar appropriate psychobiological response to stress (includir the anticipation of stress), which rapidly subsides with tl removal of the stress. Far from being pathological, physilogical anxiety or tension has the quality of a virtue the aids in efficient adaptation; it is often advantageous fe people to be on their toes. On the other hand anxiety, used as a psychiatric term, denotes a condition in which a exaggeration of this "prepare for action," or, as it is mo commonly called, the fear mechanism, is shown; and tl differentiation of abnormal from normal anxiety is nece sarily an arbitrary decision. The use of the term anxiet state is only justified if the anxiety reaction is either pr voked by an inadequate cause or, if provoked by an adequa cause, is abnormally intense and lasting. If stress is co tinued, a breakdown of the appropriate autonomic respon

may result, so that the presenting symptoms may be those of exhaustion.

Since anxiety is a psychobiological response to stress, anxiety states present not only the mental manifestations of fear, but also the bodily signs. The fear is not typically clearly focussed on any special object and, even though this may appear to be the case, the affect overflows so as to permeate the mental life, producing a feeling of inner tension and difficulty in concentration. The patients therefore describe themselves as feeling tense or wrought up, with a press of worrying thoughts and unable to settle. Irritability is a common feature; the appetite is frequently impaired, so that loss of weight may be observed; and the patients find difficulty in getting off to sleep and wake up unrefreshed after troubled dreams.

The physical symptoms and signs, which form an integral part of the emotional experience, can easily be remembered as they are similar to those produced by the secretion or increased output of adrenalin: dilatation of the pupils, rapid pulse, palpitations, rise in blood pressure, sweating, pallor and a fine tremor; tendon reflexes are increased, particularly in the arms. The patients may complain of these effects when they intrude upon consciousness or of other sensations connected with the "adrenalin syndrome": dryness of the mouth, feelings of choking or suffocation, a sense of oppression in the chest, sighing, restlessness, fatigue, weakness in the limbs, feelings of fainting, frequency of micturition, flatulence and epigastric discomfort and, perhaps above all, head discomfort or headache. The sensation of suffocation may induce over-breathing and the symptoms of hyperventilation tetany.

Anxiety symptoms are readily increased by self-observation, which is more liable to occur after, rather than during, the height of stress; and the symptoms are often misinterpreted as evidence of physical disease, readily leading to the development of a vicious circle.

Anxiety may occur in acute attacks, the first of which can often be traced back to some special experience. Subsequent attacks may then be provoked by any event that comes to be associated with the original trauma. More and more events come to be so associated, so that finally, by a

process analogous to facilitation, the "conditioned reflex" may be set going by some stimulus with no obvious connection at all. This episodic or recurrent type of anxiety merges into chronic anxiety states in which the same symptoms, though generally milder in intensity, continue for long periods. Sufferers from episodic or recurrent types of anxiety are seldom completely free between their attacks, but are irritable, tense, easily fatigued, dissatisfied and unhappy.

Three stages may arbitrarily be distinguished in the development of anxiety syndromes. In the first or early stage the normal and physiologically appropriate adrenal-sympathetic response to stress is abnormally intense. The first stage is thus one of over-reaction. In highly susceptible or unstable individuals this may temporarily result in complete ineffectiveness and, subsequently, the fear that it may be provoked again may induce restriction in activity.

When normal relaxation does not occur with relief from stress, the second stage, that of established tension may be presumed to exist. This phase overlaps with the earlier phase of that just described, when the episodic or recurrent type of anxiety merges into chronic anxiety states. During this stage, the somatic concomitants of anxiety are still generalised and prominent. The interference with life and activity that is shown is variable, depending upon the severity of the reaction and the willingness or ability of the individual to cope with it.

Certain individuals of more stable and conscientious disposition continue, however, to struggle on after the second stage of established tension has been reached. In such cases, objective evidence of anxiety and somatic tension gradually becomes less obvious and prominent, the presenting symptoms being those of depression and exhaustion, with emotional lability (popularly known as irritability) and loss of weight. It is characteristic for these cases to admit somewhat shamefacedly that they are irritable at home and unduly moved, even to tears, by sad stories, sentimental movies and martial music. This third stage has been termed anxiety with exhaustion and it merges imperceptibly into the reactive states of depression previously described. In a minor form, it was not uncommon in Great Britain in the latter war years and past war years.

Great individual variation is, of course, shown in the rapidity with which a patient may pass through these three stages and in the severity of his reaction at any time. Moreover, departures from the sequence that has been described may be observed.

It is important for the student to bear in mind that acute anxiety states, with severe and generalised somatic manifestations, are relatively seldom seen except in war; and that, even in war cases, the severe generalised somatic concomitants of anxiety usually subside (either spontaneously or more rapidly with appropriate treatment) in a matter of weeks or even days, leaving behind more or less isolated "islands" of symptoms which may not affect more than one system. Diagnostic mistakes readily occur because of an unjustified expectation of the full-blown picture in all instances. The vast majority of cases never show it; and the minority of cases who have shown it do not keep it for more than a short time.

It is, therefore, common for anxiety states only to exhibit an organ neurosis, a term that is often used when the symptomatic emphasis is laid on some one or other of the physical accompaniments of anxiety, so that the patient may complain solely of such symptoms as palpitations, breathlessness, eyestrain or headache. These patients may not complain spontaneously of tension or fear at all, although they will usually admit this if questioned, not infrequently asserting when their subjective anxiety is elicited that it is a natural consequence of their supposed physical ill health. The physician is apt to make the same mistake as the patient and to believe that his complaint is evidence of some physical disease. This gives rise to one of the most common errors in diagnosis, the true condition only being revealed after prolonged, and possibly expensive, investigations and treatment; and it is a type of error that could often have been avoided by more careful history taking.

The main reasons why anxiety may find a different organic

expression in different patients are:—

(1) A constitutional predisposition. It will often be found that headaches or nervous dyspepsia run in families. Here, too, may perhaps be placed, for reasons of convenience if not of logic, the effect of example in seeing a friend or

relation suffering from some particular form of organic disease—or organ neurosis. A childhood experience of this kind is often the determinant of the particular organ neurosis shown in later life.

- (2) An acquired predisposition as the result of disease or injury. Thus the functional blindness from which Hitler suffered in time of stress during the 1914-18 war was doubtless conditioned by his conjunctivitis following gas.
- (3) The psychological significance of the organ or part of the body affected, either for humanity as a whole or for the individual concerned. Thus the head possesses a very special psychological significance in the "body scheme" as being identified with the ego or personality, threats to which therefore tend to be experienced subjectively in the form of headaches. Again, such metaphorical expressions as being "sick with fear" or being unable to "stomach" something, express common psychosomatic relationships and are reflected in the symptomatology of the neuroses.
- (4) Special occupational demands. A "look-out man" will have his special attention drawn to his sight and will be liable to complain of this or of headache due to supposed eyestrain.

Differential Diagnosis.—The term anxiety state should not be applied indiscriminately to any case that shows the symptoms that have been described. This mistake is often made, so that a large number of conditions that should be differentiated are so labelled and wrongly. Thus, as has been mentioned, anxiety may be the predominant affect in depressive or schizophrenic illnesses or in organic types of mental reaction. Again, patients who suffer from specific phobias as the result of which they fear to do particular things lest anxiety should supervene, are better described under the heading of "obsessional neuroses" to which, as will be seen, they are clinically related by other features. Finally, anxiety states and their physical accompaniments may be intensified and prolonged by psychological mechanisms of a hysterical type, involving some secondary gain, e.g. the wish to escape from some difficulty. Thus, anxiety states can be, and often are, complicated and prolonged by hysterical reactions, just as certain physical illnesses, such as organic paralyses, may be complicated and prolonged by hysterical developments

and mechanisms. In this connection it is convenient to make a distinction between the resultant and the purposive. Anxiety symptoms are the resultants of stress: they may be biologically but they are not in themselves personally purposive in the same way that hysterical reactions are personally purposive or opportune. In practice, however, a most common condition to see is that of relatively mild anxiety symptoms, developing as the result of stress, which are then utilised hysterically as a means of escape from a continuation of the stress. Thus, a clerk may develop anxiety symptoms, manifesting themselves mainly in the form of supposed eyestrain, as the result of working under a difficult employer; and then use this supposed eyestrain as a means of changing his job, being genuinely unaware as to the origin of his condition or the nature of the subsequent motivation.

Much emphasis has been laid on the frequency of organ neurosis as a manifestation of an anxiety state. It should not, however, be supposed that all organ neuroses are of this type, i.e. that they should all be regarded as anxiety states that happen to show an emphasis on only one of the somatic components of fear. Some should be regarded as bad habits, in the production or continuation of which anxiety plays only a minimal part. An example of this would be persistent air swallowers. Other organ neuroses are frankly hysterical from the start, in that they serve some personal purpose; an example would be the persisting headaches of the delicate woman who thus avoids her household duties. Finally, others represent an exaggerated physiological response to an intense emotional experience which may be of a kind that affects everybody or only certain individuals. An example of that would be the fainting caused in certain people by the sight of blood. It seems unjustified to suppose, as has been suggested, that a keen medical student who faints at his first sight of blood in the operating theatre, necessarily does so to escape from the unpleasant stimulus; nor need he show any other alleged anxiety symptoms at all.

It will be apparent that the differentiations just outlined

It will be apparent that the differentiations just outlined represent conveniences for thought rather than sharp divisions in nature. These different types may therefore occur simultaneously or be combined in various proportions. Thus it is very common to see organ neuroses, not of hysterical origin, being utilised or exploited in an hysterical way, or giving rise to secondary anxiety symptoms. The student will, however, find that a great many patients present somatic complaints of "functional" type which cannot be pigeon-holed at all readily from a diagnostic point of view nor regarded as merely part of a larger syndrome such as anxiety or hysteria. This is particularly true of many chronic hypochondriacal complainers, for whom the prognosis is usually poor.

Aetiology, Prognosis and Treatment.—The general principle of psychiatric aetiology that was outlined on page 9 should be borne in mind, together with a clear recognition of the point that the development of anxiety symptoms is a potentiality which we all possess. This explains why anxiety states should be the most common of all the neurotic reactions and the least dependent upon the constitutional background.

It may be found convenient to consider each case under three headings: (1) Predisposition; (2) stress; and (3) the type of reaction and resultant disability.

(1) Predisposition.—This will be best shown by the past history, from which valuable pointers may often be obtained, especially with regard to such objective facts as to whether the activity of the individual had or had not been affected. Objective facts of this kind will need to be supplemented by an attempted assessment of the subjective experiences of the individual and his liability to an anxiety response, which he may not have allowed to interfere with such crude indicators as the work record. On the contrary, the possession of an anxious disposition can provide the driving force behind ambition and a successful career; but a man may finally be let down by the fact that he cannot let up.

Many admirable individuals are thus handicapped by an over-anxious temperament and, as has previously been pointed out, this may be shown as a generalised vulnerability or may be restricted to special types of stress. For example, a marked degree of sensitivity to physical hazards or dangers, and even the exhibition of physical cowardice, may be combined with considerable moral courage or an ability to face situations that may make the physically courageous quail. Thus the funk at football may be able to face the ordeal of a viva voce examination with equanimity or uphold unpopular

opinions; whilst the most physically courageous member of the hospital rugby fifteen may be reduced to a pitiably tremulous state by the former and show a sadly yellow streak when it is a question of contravening the popular view.

when it is a question of contravening the popular view.

(2) The stress or load experienced.—Here the general principles previously outlined will apply: the slings and arrows of fortune that are outrageous for one man will not be so for another. Given a certain type of predisposition, the prognosis will largely depend upon the probability or possibility of avoiding similar stress in the future. Some relevant questions are therefore: Is the stress that is responsible likely to continue or to recur? Can or should attempts be made to avoid it? What can be done to make the patient realise more clearly its nature? and his own nature, including his capabilities, potentialities and limitations?

In connection with stress, it must be borne in mind that there may be a considerable latent period between the time it starts and the development of symptoms that result from it. The importance of an increase in stress is widely recognised and there is also a growing recognition of the importance of prolonged stress of relatively minor intensity. What is apt to be forgotten, however, is that decrease in tension can be as unpleasant and disturbing as increase of tension. People seem to develop a need for the stimulations to which they are accustomed, even if they be unpleasant; removal or reduction of these accustomed stimulations, rather than their cumulative effects in any direct sense, is a not infrequent cause of symptom formation. In acute form, this is well shown in the normal experience of feeling worse after danger than during it; and a somewhat analogous reaction may be observed in slower motion and less dramatic form in those who break down on retirement. Not dissimilar reactions may be expected in men and women on demobilisation from the services, so that "deprivation" symptoms may well be displayed that are not dependent upon anxiety over future prospects, although they may be complicated by such anxiety and may also reinforce dissatisfaction with their life or jobs. A danger will obviously exist of overstressing the hysterical component in the production of such conditions.

This deprivation or relaxation anxiety has a wider practical importance because those who are accustomed to lead an

active life and are beginning to show the effects from it can readily be made to feel much worse by the advice to give up work and have a complete rest. When one root of the trouble is a discrepancy between tempo and tension, it must obviously be dealt with by increasing the tempo or decreasing the tension. Hence the importance of prescribing sedation for the latter and/or work and occupation (albeit perhaps different work and occupation) for the former. A patient who has been overstrained should not be put to bed with nothing to do without sedation (especially if he cannot sleep well), which should then be gradually tapered off as activity is increased. For the same reason a change rather than a rest (in the sense of idleness) is often the best holiday.

(3) The type and intensity of reaction—or resultant disability.—The disabilities imposed by anxiety symptoms and the extent to which an individual will interpret them as evidence of illness will depend upon (a) the ease of their provocation and their intensity and persistence; and (b) the individual's intelligence and personality and the many factors that affect his power of self-control. It is obvious that there is every possibility of variation in both these respects and, as in the rest of medicine, it is useful to separate, so far as this is possible, the patient's illness and his reactions to it. As has previously been emphasised, the latter rather than the former is an extremely common cause of the resultant disability.

A fair indication of the intensity of an anxiety state is given by the severity of the somatic manifestations; and, broadly speaking, the more prominent these are, the more is sedation indicated. The sedation of anxiety states is not only indicated on theoretical grounds, but is also justified by its success in practice. Bromides and the barbiturates can be of great benefit to these patients and may indeed be necessary to tide them over the acute stage during which they will not be accessible to psychotherapy. In the more severe cases of tremor and panic as observed during the war, continuous narcosis has proved to be the most efficient method for this purpose; and in less acute but severe cases with exhaustion and loss of weight, a course of modified insulin therapy, as described on p. 66, can be of great benefit.

The immediate prognosis for acute anxiety reactions is

good; the ultimate prognosis is a variable dependent upon

predisposition and stress.

As regards psychogenesis, the psychoanalytical school has proffered the formula "Morbid anxiety means unsatisfied love." That this can be the correct explanation need not be doubted, but this formula is far too narrow. Any external stress or internal conflict endangering the moral or social standards of an individual can result in the production of anxiety states.

The rationale for psychotherapy in anxiety states derives from the fact that the sufferers are usually unaware of the true nature of their difficulties or at least do not face them openly. Hence they tend to turn their attention to their less vital problems, namely their symptoms. This indicates the line of treatment that should be adopted. The patient has to be led to realise the true basis of his difficulties and to try to readjust his standards to the requirements of his social environment, in so far as the latter cannot be modified by him or for him.

Just as the prominence of somatic symptoms gives an indication of the need for sedation, or an approach from the physical side, so should their lack of prominence or absence suggest an increased emphasis on the need of a psychological approach, including psychological management and psychotherapy as previously outlined in the chapter on Treatment.

Psychosomatic Medicine.—It is convenient at this point briefly to consider psychosomatic medicine, a subject of comparatively recent development that is neither firmly established nor clearly defined. The justification for its separation from the rest of medicine would seem to lie in the application of previously somewhat neglected, if not new, methods to general medical problems. These methods are essentially psychological; and since, until recently, it was largely the privilege of the psychiatrist deliberately to employ psychological methods in medical problems, a few remarks on the subject may not be out of place in this short introduction to psychiatry.

At least four distinct avenues of approach can be discerned which are all called psychosomatic:—

(1) The study of the psychological origin of somatic symptoms and of organ neuroses.—As has so often been emphasised

throughout this book, somatic symptoms are often the main and may be the only obvious manifestation of a psychiatric syndrome. Moreover, complaints of this type are extremely common. Consequently, patients with these complaints have usually sought the advice of a general physician; and in too many instances, when a physical examination has excluded any organic cause for their palpitations, breathlessness, dyspepsia, impotence, or whatever it may be, have merely received reassurance that there was no evidence of organic disease. Even physicians, however, who were clearly aware of the possible psychological origin of such complaints, have often hesitated to invoke the aid of a psychiatrist, partly because of the association of psychiatrists with insanity and their lack of experience outside this field, partly because of the belief that the distribution of sensible psychiatrists working outside mental hospitals was somewhat similar to that of snakes in Iceland, and partly out of deference to the ignorance and prejudices of their patients who would often maintain that they were neither mad nor in need of psychoanalysis. Certain general physicians, stimulated by the growing interest in psychology and psychopathology, consequently decided, or felt themselves forced, to employ psychological methods of investigation and treatment themselves.

This development, in so far as it is a reflection of a growing recognition of the importance of a closer link between psychiatry and general medicine and the need for better psychiatric education, is a most valuable one; and the psychiatrist who may feel tempted to point out that much of what is being proclaimed as new discoveries was in fact well enough known, or to twit certain general physicians not for their open, but for what may seem their unduly hospitable minds, may perhaps rightly be accused of wrongly advocating a narrow trades unionism.

(2) The discovery of psychological factors precipitating or causing organic disease.—Once the eyes of the profession had been opened to the psychogenesis of functional conditions, the operation of similar psychological factors in cases with a definite anatomical or biochemical pathology soon became obvious. That emotional causes could play a part in precipitating chorea, Grave's Disease and diabetes ("when stocks go down, diabetes goes up") had long received a

semi-official recognition. The discovery of similar factors in essential hypertension, angina, peptic ulceration and many other conditions has gradually raised the consideration of actiology from a psychological as well as from a somatic angle to a more or less legitimate and respectable position in the eyes of the medical world. The psychological factors contributing to accidents form an extension of this problem. They range from such general problems as that of fatigue (an important cause of industrial accidents) to disturbances of concentration and capacity for decision dependent upon emotional factors (that play their part in road accidents) up to more speculative conceptions of subconsciously motivated suicidal attempts.

- (3) Somatic disease in relation to psychological types.—Some investigators have gone beyond the analysis of psychological causation, and the variably important contribution of psychological factors in the origin of somatic symptoms and somatic disease, to study the personality types in the various kinds of physical illnesses. A certain correlation has, for example, been claimed between an over-anxious, worrying personality with obsessional features and a liability to peptic ulceration. In the interpretation of such correlations, emphasis is sometimes laid on the psychological make-up of the patient and the importance of this in the psychogenesis of his illness; whilst others would maintain that the psychological traits that have been discerned are not so much the cause as an indication of a constitutional set up or predisposition, that is manifest both in the psychological as well as in the somatic aspect of the total personality. For those who incline to this latter view, any discussion as to which is primary has little meaning, the relevant question being the practical one as to which was the more important or modifiable, whilst recognising that both avenues of approach should be used.
- (4) Psychological reactions to somatic disease and defect.— This is an approach to psychosomatic problems from a very different angle. Every somatic illness has a subjective side in the patient's own experience of his illness. In certain diseases this subjective experience may be complicated or subtly modified by mental changes due to the disease itself: the toxic confusional states (or "symptomatic psychoses") are but an extreme example of this phenomenon. The mental

state of tuberculous patients is another instance that is further complicated by the psychological effects of environmental factors, such as prolonged hospitalisation and loss of earning capacity. Again, permanent mutilations, or disabilities due to disease or injury, require psychological adjustments that are conditioned both by the type of damage or defect and by the type of personality that is afflicted. Further, such factors as the age and sex of the sufferer have to be taken into account as well as his individual characteristics, such as his or her temperament, ambitions and intelligence.

Unless points like the above are borne in mind, the direct results of the disease on the brain of a generalised and impersonal kind (e.g. clouding of consciousness in toxic confusional states); the indirect consequences of the disease and the reaction to this likely to be shown by most people (e.g. "hospitalisation" in any prolonged illness), and the responses that are individually conditioned in both instances, may not be separated as clearly as they might be, and may lead to unwarranted deductions and generalisations.

## CHAPTER XII

## **OBSESSIONAL STATES**

BSESSIONS may be defined as contents of consciousness which cannot be got rid of, though on quiet reflection they are recognised as senseless, and which are accompanied by a feeling of compulsion.

Anxiety is readily produced by internal struggle against obsessional intrusions or if compulsive impulses meet with external interference in achievement; and patients often seek advice complaining of this anxiety rather than of the obsessional symptoms which led to its production.

There is no sharp line of demarcation between obsessional symptoms and normal experiences and habits. All children develop certain rituals: they "have to" walk on the cracks of the pavement or avoid them, and they "have to" put certain toys in certain places. Again, most adults indulge in a particular order when they dress or undress, or when they arrange their possessions, books or papers. Any disturbance of the accustomed routine tends to produce an unpleasant affect. This varies in intensity; and all transitional stages may be observed from a transient sense of irritation, through the more obsessional experience of being a slave of habit and of being forced to obey certain rules, up to full-blown obsessional phenomena. Similarly, the unpleasant sensations commonly experienced when walking in a fog, or the black-out, shade into a pathological fear of the dark, clearly recognised as such, which may compel a phobic to stay indoors after nightfall or to avoid poorly lighted passages. A phobia is a fear that is recognised as being irrational; therefore fear of battle or similar rational fears should not be called phobic. Fear of open spaces (agarophobia) or of closed spaces (claustrophobia) are sufficiently common to have been given special names.

There is a similar gradation between an excessively tidy person and the patient who cannot bear to touch common objects without feeling compelled to wash his hands, perhaps repeatedly; which may go on to the development of most elaborate preventive measures against contamination with dirt or germs.

More or less specific phobias are often the predominant, although rarely the only symptoms, and individual cases vary greatly in the defensive elaborations they may develop against the fear-producing situation. Some patients may, for example, travel by circuitous routes in order to avoid certain open spaces; others may walk long distances rather than go by tube or underground; whilst others, with a fear of contamination, may feel compelled to put on gloves before touching a door handle.

Obsessional impulses show a similar variety. Some patients may feel forced to touch things or to count or arrange them in a special order. Alarming or antisocial impulses, e.g. to commit suicide or homicide, can be mastered unless the obsessional state is complicated by the features of some other syndrome such as depression: exceptions to this rule are extremely rare. As in the case of phobic patients, those with obsessional impulses tend to elaborate defence mechanisms by the substitution of more harmless actions. There is also a tendency for these ceremonials to become more and more elaborate and this can make the behaviour of long-standing obsessionals appear very odd. Compulsive utterances may also occur, sometimes consisting of meaningless ejaculations or words, but often having a manifest or slightly disguised content of an obscene kind. The impulse to swear or to blaspheme or to be obscene may be aroused by religious pictures or symbols. Recurring obsessional experiences or thoughts may be verbal or musical or may take the form of visual imagery or pictures. Most people have had the experience of a tune running in their head to the extent of being trying: but in severe obsessional states the repetition of meaningless phrases in questions such as "Why is that so?" "Why is God?" "Why is the world?" "Why is not nothing?" may become a torture. Others develop doubts and scruples about what they have done or should do, or feel impelled to go back repeatedly to see whether the door is shut or the gas turned off. They know intellectually their conduct is unreasonable; but the affective component of doubt recurs (folie de doute). Others may have to repeat

calculations or make sure that the wrong letter was not put in the wrong envelope. An extreme example was a patient who felt compelled to write out the next day's programme in shorthand the night before, taking some hours over the task.

Aetiology.—Personalities of an obsessional type are often described as excessively neat, tidy, orderly, parsimonious, over-careful and over-conscientious. They often appear to others as unduly fussy, overstrict and rigid; they may also appear to be slow and undecided owing to the complicated weighing of the pros and cons that precede action. Personalities of an obsessional type are also characterised by high moral standards and lofty ideals, making big demands both upon themselves and upon others. Finally, they are often much preoccupied with their health, their diet and their bowels—hence the term anal character.

The vast majority of obsessional personalities never become the subject of medical care; and if they do break down, the ensuing illness is by no means necessarily that of an obsessional neurosis. On the contrary, it would be true to say that the commonest type of illness from which these personalities suffer is a mixed state of anxiety and depression, the patients having driven themselves on until a state of exhaustion results. It is interesting to note that the incidence of obsessional neurosis was not increased as the result of war stress.

On the other hand, true obsessive-compulsive states may develop in personalities with little or no evidence of obsessional characteristics in their previous make-up. Again, obsessional symptoms may occur in organic brain disease, as after a head injury, in patients who have given no sign of constitutional predisposition. The close connection between obsessions and paroxysmal neurological symptoms, such as the oculogyric crises of post-encephalitic Parkinsonism, is of considerable theoretic interest in connection with psychogenic theories of causation.

Heredity is certainly important and one-third of the parents of obsessional patients and one-fifth of their siblings exhibit pronounced obsessional traits.

The psychogenesis of particular obsessional symptoms can often be traced far back in the patient's history of a life-long

battle between high and rigid moral standards and instinctual urges, sexual and aggressive. These moral standards are often personified as the "Super Ego." The theory is that if and when the normal rational defences fail, the obsessional falls back upon the defensive mechanisms that have been described, these constituting his manifest symptoms. These defensive mechanisms result in the production of substitutes which symbolise the "forbidden" action or thought, these substitutes being more permissible owing to their apparent meaninglessness or neutrality, in much the same way as "blooming" and "parbleu" have been substituted for less acceptable swear words; and in both instances the origin is either gradually forgotten or repressed. The tracking down of obsessional symptoms to the point of origin may, however, be extremely complicated; for substitutes may be replaced by other substitutes; so that finally the manifest symptoms may have no obvious connection with its real or alleged source. Psychoanalysts put the origin of obsessional symptoms at about the time of the acquirement of bowel control: it is not possible for those who have not descended so deeply into the evolution and workings of the unconscious mind to affirm or deny such a statement. There is, however, general agreement that whether they be constitutional in origin or determined by early experiences, obsessional phenomena become deeply ingrained in the personality and are difficult to modify.

Prognosis.—The prognosis for an obsessional illness depends upon the setting in which it occurs. The anxiety that is dependent upon specific phobias may be eased by sedation, which may also be of value in fortifying patients against their special difficulties. When obsessional symptoms are present or when obsessional characteristics become more acute and incapacitating within the setting of a depressive state, the prognosis is that of the depression and is usually good. Certain patients, however, have recurring obsessional episodes without much evidence of an underlying depression to carry them. But when the onset is insidious, the progress slow, and the symptoms tend to become more and more elaborate, the prognosis is extremely poor. A severe obsessional illness may preclude the patient from all work and activity and induce a life of seclusion little different behaviouristically from

that seen in schizophrenia. Severe obsessional symptoms in youthful individuals not infrequently pass into definitely schizophrenic illnesses later.

In a follow-up study, made many years after discharge upon an unselected group of obsessional patients, it was found that one-half were well, one-third stationary or worse, and the remainder ran a fluctuating course.

The differential diagnosis in chronic obsessional neuroses from schizophrenia may be difficult, for the emotional response of such patients is often poor. The same differential difficulty occurs in younger age groups when obsessional symptoms are present but evidence of conscientiousness, apart from the circumscribed ambit of the obsessional rituals, is not.

It is essential for the correct diagnosis that the criteria for an obsession should be borne in mind, and that the compulsion should be regarded as irrational, alien to the personality and something to be fought against. Thus, for example, a man with an ethical urge to do good, who feels unhappy and dissatisfied unless he lives up to his ideals by carrying his impulses into action, is different from a true obsessional who regards his impulses as an intolerable irrational load he would willingly forego.

It is also proper to state that not all authorities would include the more specific phobias under the obsessional states. Yet true phobic states do fulfil many of the obsessional criteria and the personality of such sufferers is not infrequently of an obsessional type. The concept of the phobic must not, however, be extended too widely and should fulfil the criteria already laid down.

The treatment will also depend upon the psychiatric setting. Patients with depressive components must be treated like depressive states. Specific phobias can seldom if ever be removed; but the patients can often be helped in circumventing their difficulties or in managing them. In this, as in other psychiatric conditions, the severity of the disability is often exaggerated or complicated by hysterical mechanisms. For example, a number of prisoners complain of claustrophobia; but the number of these who genuinely cannot stand being locked in cells is negligible.

A carefully planned regime assists some obsessional patients to overcome their difficulties, and a change of surroundingssuch as admission to hospital—often leads to some improvement.

Sod. Amytal in small doses (gr. i) helps many phobics to overcome their fears temporarily (e.g. fear of train journey).

Much can be done in the way of social adjustment when a breakdown has been precipitated by unsuitable work or undue responsibility; and the development of prophylactic measures may be possible on these lines. Thus obsessional personalities may be admirable in positions where their conscientiousness and reliability are a valuable asset, yet useless in other positions where quick decisions and actions are required. Thus a thin, neat, conscientious and wholly worthy bank clerk, trained in radio telephony, spent three years in Malta on flying control and stood up to all the strain of the siege. He loved the systematic work on which he was employed amidst the greatest danger and discomfort. He broke down rapidly, however, when transferred to irregular work requiring rapid decisions on his return to physical safety.

Prolonged psychotherapy has not so far substantiated any real therapeutic success. Prefrontal leucotomy, as has already been mentioned on page 69, has however produced most striking symptomatic relief in many severe cases. The symptoms do not disappear, but become less obtrusive. In severe long-standing cases where life is a misery the possible disadvantages due to the post-leucotomy personality changes can be more than outweighed by the greater ease and happiness. The very qualities that make for an obsessional type of illness tend on the whole to minimise the unfortunate personality changes that can occasionally follow a prefrontal leucotomy.

### CHAPTER XIII

## HYSTERICAL REACTIONS

HE term "hysteria" or "hysterical" is one of the most ambiguous in the whole of psychiatric literature. It is often used as a synonym for psychogenic, with special reference to any behaviour that seems histrionic or exaggerated. It seems more desirable, however, to restrict its use to those psychogenic reactions which are produced or prolonged for the sake of some gain which the illness brings in escaping from some difficulty, or in fulfilling some wish, or in satisfying some desire, either in reality or fantasy. In brief, we believe that the concept of hysteria should be limited to those psychogenic reactions that serve some personal purpose.

This definition excludes psychological or psycho-biological responses that are purely an integral part of an affective reaction or emotional state, such as the symptoms of anxiety and depression previously described, or the fainting or vomiting that may be produced as the result of some unpleasant or disgusting sight.

In connection with hysterical conditions the student should bear in mind:

- (1) The hysterical patient is never clearly and fully aware of his hysterical motivation; if he is clearly and fully aware of this type of motivation, the case is not one of hysteria but of malingering. The amount of successful self-deception that is achieved in hysterical reactions nevertheless varies greatly, and all transitions between hysteria and malingering may be observed. It would, however, be a mistake to suppose that frank malingering is at all common (except perhaps as a very short-lived initial phase) for, as has rightly been said, this would be a naive under-estimate of the capacity of human beings to believe what they want to believe and what they think is in their own interest. This endowment makes malingering unnecessary.
- (2) The "escape into illness" notion has the attraction of a formula, and of the somewhat cynical formula, that is easy

to remember and to apply, in the sense that it is easy to make what for many is this accusation. Again, since life is difficult and since we all desire our world to be somewhat different from what it is, some apparent justification for its correctness will usually be forthcoming. It is therefore necessary to beware of the danger of jumping to the conclusion that some obvious difficulty to which this formula does seem to apply gives a full or correct explanation of a given case.

(3) Another common fallacy is that an over-emphatic or histrionic method of verbal expression or motor demonstration is necessarily evidence of hysteria. This need not be so. It may be merely a cultural manifestation as in many south Europeans and Jews. In the past it seems to have been the common enough form in Great Britain: our eighteenth-century ancestors were unashamedly lachrymose. When it is not a cultural manifestation it should often be regarded as the sales talk of the simple, with no other objective than a desire to impress. This type of behaviour may frequently be observed in socially admirable and hard-working, if perhaps rather simple, men and women, with little evidence of either hysterical personalities or of obtaining any gain in the sense of escape from their difficulties. The desire to impress or to obtain the interest of the doctor can scarcely be regarded as abnormal at all. It is therefore necessary to look behind the mode or convention of expression and try to determine its object, whilst realising that the patient need not be clearly aware of this object; few patients are.

Actiology.—There can be no doubt about the importance of constitutional predisposition or that certain types of personality are more prone to develop hysterical reactions than others. It may be recalled that the hysterical personality described on page 91 was characterised by egocentricity, an associated deficiency in the sense of social and moral responsibility or duty, shallow labile emotions, coupled with a tendency to self-display, a facile capacity for self-deception and a striking childishness and immaturity. In some degree these qualities are shared and shown by the whole of mankind, so that the differentiation of hysterical from normal personalities is entirely a question of degree. In particular, we all possess the capacity for self-deception, the result of what is known technically as "dissociation," and we are all suggestible.

The production of hysterical symptoms can be greatly facilitated by suggestion, and hence any condition of heightened suggestibility provides a fertile soil for their development. Children are more suggestible than adults and therefore an innate tendency towards hysteria can be greatly increased by an unfortunate upbringing. Again, suggestibility is increased in infective exhaustive conditions and in crowds, and consequently the phenomena of mass hysteria are prone to occur in exhausted and under-nourished groups, e.g. shipwreck survivors or in mass meetings of Faith Healers, Revivalists and Nazis. Certain other situations also possess considerable potency in increasing suggestibility, and, so far as medical men are concerned, a visit to the doctor, coupled with the atmosphere of his consulting-room, may have a profound suggestive effect that can be good or bad. Hysterical manifestations are not infrequently a direct result of medical activity.

Crude hysterical reactions are more common in women than in men, and this may be associated with the less rigorous discipline to which women were subjected and the sheltered life a number were allowed to lead; for hysterical personalities crave for and thrive on protection so long as they can get their own way. The daughter who is too delicate to leave home and the clinging, femininely dependent, yet essentially selfish flutter-pate of the "little woman" variety, are common hysterical types. The secondary sexual characteristics are frequently under-developed; puberty is a favourite period for the first alarming manifestations; and sexual frigidity may often be observed at a later date.

Symptoms and Diagnosis.—The symptoms in hysterical illness may be either physical or mental or both. The physical symptoms may imitate those of any type of illness, but the imitation is generally a rough one since it corresponds to the idea that the patient has of the symptoms of the illness in question. Thus, hysterical anaesthesiae are generally of the glove and stocking type, *i.e.* they are limited to what the patient thinks is a functional unit.

With the spreading of general medical knowledge amongst the general population, gross physical manifestations such as hysterical blindness, deafness and paralysis have tended to decrease at the expense of vaguer and subtler complaints such as headaches, dizziness or feelings of faintness, and in fact gross hysterical conversion symptoms are nowadays quite rare. The rather crude tricks that were previously employed to demonstrate the old-time gross physical conversion symptoms ("say yes when I touch you with this pin and no when I don't") are therefore inapplicable in an increasing number of instances. The diagnosis of hysteria consequently calls for more subtle methods and an increasing knowledge of general medicine as well as of neurology. The internist tends to see these cases nowadays rather than the neurological specialist. This has led to the erroneous deduction that hysteria is on the decrease when all that has probably happened is that the manifestations of it have changed.

This change of manifestation calls for greater knowledge on the part of the internist of the positive psychiatric findings upon which a diagnosis of hysteria should be based.

The diagnosis of hysteria depends upon (1) not merely the exclusion of other physical or mental disease that might account for the symptoms, but also upon (2) the positive demonstration of psychogenic factors that do account for their occurrence or continuation. The diagnosis of hysteria is not therefore a diagnosis by exclusion; it is essential to find positive evidence for the diagnosis as well. In this connection the general physician should not suppose that because he cannot find any physical organic cause for a condition, and this perhaps especially applies to localised manifestations such as localised pains, that the diagnosis is necessarily one of hysteria. In many somatic complaints of supposedly functional origin, psychiatrists are as unable to find anything positive from their point of view as is the internist from his point of view, and can contribute little to treatment except such benefit as may be derived from sensible psychological management.

In the positive diagnosis of hysteria, the personality, past history and present behaviour of the patient possesses great importance. Thus, marked hysterical personalities can react to trivial difficulties with the development of severe hysterical symptoms, difficulties sometimes so trivial as scarcely to make it credible that they can possess any significance at all. The history in such cases would probably, however, reveal similar reactions in the past, although sometimes it may only reveal a very sheltered and self-indulgent life and little more, so that

no gross hysterical reactions were displayed because there was no occasion for their appearance. As regards their immediate behaviour, hysterical patients often show a characteristic attitude towards their symptoms, either describing them with the classical belle indifference or demonstrating them ostentatiously; or combine both methods as in those who employ melodramatic language or exhibit fantastic physical contortions when asked to show their disability, with a brave, smug smile on their placid face. Another characteristic hysterical facies, more easy to recognise than to describe, is that of a sort of carefully composed martyrdom. A typical hysterical statement from a girl who had given up a long succession of jobs because of supposed physical ill-health, and succession of jobs because of supposed physical ill-health, and who had found her last position in a nursery school too much for her, was: "I was never one to spare myself. As my last doctor (such a nice man) said to me some months ago, 'For you to go on working in your present condition would be like trying to ride a bicycle up a steep hill with the brakes on.' I should like nothing better than to go back to work. I love my work, I love children and I love doing good. But as my mother said to me only last night, it would be silly to do so until I am really fit again. I am afraid to say I think she was right. These headaches are just like a drill being driven in my head. It starts... and... and... And when I am fit? I have always been artistic and interested in interior decoration—I always been artistic and interested in interior decoration-I

am thinking of taking up art."

Classification.—Classification according to symptomatology would lead to an almost endless list of sub-headings. While it is of psycho-pathological interest to determine why one man develops headache and another amnesia, it is of greater practical importance to know why he should have reacted hysterically at all. This insight is best attained by means of a classification related to the mental state as a whole.

a classification related to the mental state as a whole.

(1) Primary Hysterical Reactions.—The presence of motivation is essential to the whole concept of these more purely hysterical reactions, the motivation, as has been explained above, being of a personally purposive kind. The most common physical manifestations are "organ neuroses" (p. 181) that may be of any type, the head and the stomach being perhaps the favourite centres for somatic complaints, which are typically variable and multiple.

When motor phenomena are shown by hysterics, physiological mechanisms often appear to be utilised and it may therefore be extremely difficult to distinguish between hysterical and extra-pyramidal symptoms, e.g. choreiform movements. All transitions between trembling, shaking and twitching and hysterical fits may be observed. All hysterical manifestations may be greatly changed by external circumstances which is a reflection of the increased suggestibility. Simple vaso-motor collapse or fainting, though not in itself hysterical, is often utilised hysterically. The clouding of consciousness in hysterical fits is usually less deep than in an epileptic; the patients generally do not hurt themselves, bite their tongues or pass water; nor do they pass through the typical tonic-clonic phases, but tend instead to show purposive movements. The pupils are often widely dilated, but respond poorly to light; the tendon reflexes are normal and equal; and a Babinski response is never seen. Finally, hysterical fits are precipitated by emotional causes and tend to vary in intensity according to the presence or absence of spectators.

The mental manifestations of hysteria are hysterical amnesias and fugues, short-lived psychopathic reactions with an anomalous symptomatology and, more rarely, twilight states and trances. A clear distinction must be made between hysterical amnesia and hysterical fugues. In the former there may be clear evidence that the patient knew quite well what he was doing when he did it, although he will, with varying degrees of genuineness, claim to have forgotten this subsequently. A classical example would be of a man who claims to have lost his memory when he comes back late from his leave. In hysterical fugues, on the other hand, patients wander off whilst really in a condition of clouded consciousness and may be found far from their own homes, not knowing who they are or how they got there. In such cases a history is usually forthcoming of symptoms preceding the onset of the fugue and they are frequently a complication or culmination of what should be regarded as mainly affective syndromes. In purely hysterical fugues, adequate reasons for the disappearances can usually be discovered without difficulty. Hysterical psychopathic reactions do not differ from other psychopathic reactions (see p. 233) except in so far as they

are coloured by and are an expression of the hysterical personality. They may simulate a psychosis and raise the suspicion of schizophrenia. The content, however, tends to be melodramatic, the patient for example claims that he hears his fiancée calling him at night or that angels appear to speak and give advice, the description usually being given with some relish.

Trances are dream-like states which may be produced by suggestion or emotional shock and physical factors may assist in their production. The capacity to pass into a trance-like state may be facilitated by practice and some mediums have developed this capacity very markedly.

Hysterical twilight states, often called Ganser states, are

Hysterical twilight states, often called Ganser states, are extremely rare except in prison practice. They consist of a mild disturbance of consciousness and the symptoms are such as a lay person imagines a lunatic to show. Wrong answers may be given of a kind that clearly indicates that the correct answer is not far from consciousness. Thus a patient when asked to multiply 2 by 2 may give the answer of 3 or 5, but not 4. Sometimes these patients pass into an hysterical stupor which differs from catatonic stupors in that the vital functions are not so deeply involved.

Hysterical pseudo-dementia is a more common and closely allied condition in which the same type of wrong answer can be seen, but which does not exhibit a disturbance of consciousness. It is particularly prone to occur in those of sub-

sciousness. It is particularly prone to occur in those of sub-normal mentality when subjected to stress and the picture may strongly suggest an organic dementia.

(2) Simple Dissociation.—In contra-distinction to the first (2) Simple Dissociation.—In contra-distinction to the first group, hysterical, in the sense of escape, mechanisms of a personally purposive kind do not predominate. A man can certainly develop a crude hysterical paralysis of his arm following upon an injury received in battle, because he dislikes battle and can thereby escape from it; but it must not be supposed that similar psychological determinants are necessarily displayed in all cases of so-called functional disability. Thus, many patients exhibit a functional disability, following an organic injury, that is not due to hysteria, but to anxiety as to whether their arm, or whatever it may be, can work properly after removal from its plaster cast. In such cases the escape motive may be completely absent. Moreover, the past history of such individuals may clearly show that they were not of a hysterical type; the symptoms seem to arise as a result of dissociation in a setting of emotional tension or increased suggestibility. What is required in the treatment of such cases is reassurance and re-training; but, of course, all gradations and mixtures may occur between simple doubt or anxiety that becomes crystallised or "converted" into disability, and hysterically motivated prolongation of disability.

- (3) Hysterical Prolongations and Elaborations.—Here the hysterical symptoms lead to an extension, either in duration or severity or both, of some pre-existing psychological or physical disorder. Typical instances are the hysterical persistence of headaches in patients convalescing from head injury and of tremor following acute anxiety. Another important group is composed of those suffering from affective illnesses. It is often very difficult to determine when an affective illness, either of the anxiety or depressive type, can be said to have run its course and when active rehabilitation should consequently take precedence over other methods of treatment. There is no end to the list of mental and physical disorders which may form the basis of hysterical elaboration of this kind.
- (4) Secondary Hysterical Reactions.—In these conditions the hysterical reaction can only be fully understood with due reference to the psychiatric setting in which it occurs. Thus, a large number of rather crude hysterical reactions are exhibited in those suffering from the higher grades of mental deficiency. Cases of this type are often best formulated as dullards with secondary hysterical reactions superimposed, which are apt to be of a crude, simple or primitive type. Similarly, secondary hysterical reactions can be observed, not as a prolongation of, but as a complication or secondary manifestation in affective states or in other types of psychiatric syndrome such as schizophrenia or cerebral arteriosclerosis.

Pathogenesis.—A general and satisfactory solution of the problem as to how psychological experiences and stresses can become converted into physical symptoms is no more possible than a general and satisfactory explanation of the relationship between mind and body. As has previously been pointed out, some hysterical symptoms originate from either the normal or unusually intense somatic accompaniments of emotion,

such as tremor with fear or nausea with disgust. Certain other hysterical symptoms can be regarded as the expression of a more personal meaning. Thus certain hysterical tics can be regarded as expressing denial or acceptance and, in their simplest form, such manifestations may be observed in children who develop habits that pass insidiously into tics of nodding or shaking their heads. Again, that a particular individual or situation "gives me a headache" appears to be the foundation for certain hysterical headaches. Symptoms that start in such ways may be ground-in by repetition, or they may continue as conditioned reflexes fired off by stimuli associated with the original trauma.

It must be assumed that all physical symptoms have a

associated with the original trauma.

It must be assumed that all physical symptoms have a physiological basis and some of the physical mechanisms at work can be demonstrated. Yet a psychological factor is necessary to start these physical mechanisms going; and in hysterical reactions there is always a flight into illness or a defence mechanism with the object of gaining security or satisfaction that is not fully obvious to the patient. When trying to investigate the psycho-pathology of such escape reactions, it is necessary to aim at finding the specific conflict the patient tries to solve by the production of his symptoms. Escape from reality or similar general phrases explain nearly everything and therefore explain nothing, and as has previously been emphasised, many abnormal mental reactions could be described in such terms, although they are not motivated nor adequately caused by the intention to escape.

Prognosis.—The prognosis of the individual hysterical reaction or episode is good and becomes all the better if the special difficulties that gave rise to it have passed or are capable of resolution. The prognosis for the hysterical disposition is more serious and difficult to assess. The disproportion between the stimulus and the severity of the

Prognosis.—The prognosis of the individual hysterical reaction or episode is good and becomes all the better if the special difficulties that gave rise to it have passed or are capable of resolution. The prognosis for the hysterical disposition is more serious and difficult to assess. The disproportion between the stimulus and the severity of the reaction in the present, or in previous illnesses should these have occurred, may be used as a guide; for patients who have broken down in response to a negligible stress are more liable to relapse than those who have been defeated by a severe strain. When frequent hysterical reactions have been shown, the outlook for the future becomes worse, and a marked hysterical character makes the prognosis more grave. Hysterical reactions in childhood or adolescence are less

serious and more optimism is justified until the character can be regarded as set with increasing age in an established immaturity. The reaction to a change of environment, if this can be effected, may alone permit of a decision as to how deeply ingrained the trouble may be; but it is often hard to achieve, since neither the patient nor relations may desire or permit it. One of the main difficulties in the treatment of young hysterics comes from the attitude of the relations, who not infrequently show similar dispositions themselves, are unduly doting, or selfishly crave for the love of their children and are hence unwilling to permit the exhibition of that firmness and discipline that may be necessary. There can be no doubt that a predisposition towards an hysterical response can be influenced by the environment and it often diminishes or disappears after puberty.

The differential diagnosis from other conditions can be very difficult. Emphasis must be laid once more upon the necessity of positive evidence rather than reliance upon the diagnosis by exclusion. The influence of emotions and suggestions on the symptoms must be carefully observed and, as has previously been pointed out, a sound knowledge of general medicine as well as of neurology is becoming increasingly necessary. It must also be remembered that hysterical reactions can be facilitated by organ disease, and this factor should always be suspected when the past history is clear and the personality is good. In particular, organic mental changes provide a fertile soil for physical conversion symptoms of all kinds; and it is a good rule to take the blood pressure, look at the fundus and test the memory in any patient that shows such symptoms for the first time when over forty, e.g. develops a functionally paralysed leg. The differential diagnosis of severe hysterical reactions from major psychoses can also be difficult, and all the more so since hysterical personalities may develop such illnesses. A fair rule is that if there is reasonable doubt between the diagnosis of hysteria and schizophrenia, the case is probably the latter.

Treatment.—One of the main difficulties in the treatment of hysteria derives from the fact that hysterical personalities are apt to arouse a strong emotion of irritation and dislike in the hearts of many doctors; they seem such selfish hypocrites and take up so much time. Medical men perhaps tend

as a group to be practical and pragmatic in their view of life and to rate the capacity for efficient performance a good deal higher than the capacity for sensitive appreciation, feeling that the latter is only justified if it is translated into works. Both their temperament and training makes them distrust the mystical and subjective and, like good puritans, they hold that the proof of the pudding is not in its contemplation but in its eating, and that, when eaten, the value of the pudding lies in its power of sustenance rather than in its taste. With many hysterical personalities, however, the values of life reside in subjective experience and subjective development, without necessarily much urge for practical performance that does not directly nourish these needs. This scale of values, seen at its best in certain artists and mystics, is apt to be ill-mated with the demands of the workaday world and to be highly antipathetic to different temperaments to whom it may appear as merely egotistic self-indulgence.

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As has previously been suggested, the affect engendered by the more difficult hysterical personalities is apt to be transferred to all cases who exhibit physical conversion symptoms on the false assumption that all patients who exhibit these symptoms are of the same type; but as has been seen this is not true. Those, therefore, who are unable to conquer their revulsion towards hysterical personalities may be helped by bearing in mind that physical conversion symptoms can and often do develop in patients of quite a different type, who do not exhibit hysterical characteristics any more than they may do themselves. We are all capable of and have all practised some hysteria.

The aim of treatment in hysterical cases should not be confined to the removal of symptoms, but should also be directed

The aim of treatment in hysterical cases should not be confined to the removal of symptoms, but should also be directed to the alleviation or solution of the underlying conflict or difficulties that led to their production. In the removal of conversion symptoms, treatment by some form of suggestion is usually the method of choice; which particular method the therapist uses depending on the type of case, the individual experience and gifts of the doctor and on his technical facilities. Crude and even drastic methods of suggestion can often be applied with success to simple and unsophisticated patients and it is quite legitimate to employ, for example, faradism for suggestion and persuasion in patients of this type.

Explanation, reassurance and firm persuasion can often remove recent conversion symptoms in an intelligent and co-operative patient, particularly if he is not faced with a difficult situation should his symptoms disappear. In other cases, when the symptoms seem easily susceptible to suggestion, narco-hypnosis, *i.e.* hynopsis after a dose of a hypnotic, is often simple, quick and successful; but since it is seldom possible to send a drugged and intoxicated patient home, this method is usually reserved for in-patients. In order to be successful, even these rapid methods of treatment demand some psychological preparation, including an explanation of the nature of the treatment and of psychogenic symptoms. In cases of fugues and amnesias, hypnosis or narco-hynopsis is usually employed, sometimes in combination with abreaction when this seems necessary.

Hysterical symptoms are likely to recur in the same or in different form unless an attack can be made on the basic psychological problems or unless the environmental stress diminish. It is therefore necessary to study the difficulties that have been experienced in adaptation to life and to plan treatment in accordance with the findings. The amount of psychotherapy that is possible largely depends upon the personality of the patient in its possession of what may perhaps be called mental honesty. Marked hysterical personalities are usually incapable of more than verbal insight and the most fruitful approach is often indirect and environmental. It should, however, be remembered that hysterical qualities may be of value in the patient's readaptation. Many hysterics do very well in positions where they may play act (witness the stage) or duly indulge in self-demonstration or sacrifice (so long as the sacrifice is not self-sacrifice but rather sacrifice to self), or where their work permits them to find such attachments as they were previously unable to form. A not uncommon sequence is that of an hysterical adolescence, an admirable if somewhat demanding motherhood, and once more an hysterical matronhood when the children have grown up and left home.

Compensation neuroses are special examples of hysterical reaction. On a superficial view the monetary gain provides the motive which causes or prolongs a neurotic reaction to an accident or illness covered by insurance under the Workmen's

Compensation Act or other source. Although it is perfectly true that the fact of being insured is very important, it is mainly so because it permits the patient to indulge more readily in conflicts and fears arising out of the situation produced by the accident. Most of us have latent conflicts and fears, and a period of enforced idleness may permit such conflicts and fears to nibble their way through to the surface. If the patient had not been insured, he would have had a greater inducement to put up with the symptoms resulting from the conflicts and fears.

Compensation neuroses seldom improve before the question of compensation has been settled, but it must not be supposed that all cases clear up as soon as this has been done. If they do not improve after settlement—and a large number do not—a thorough investigation of the patient's life becomes necessary, and readaptation according to the result of this should be attempted, aided by suggestive treatment for the particular symptoms that are shown.

War neuroses are discussed in more detail on page 217.

#### CHAPTER XIV

## THE LEGAL ASPECTS OF MENTAL ILLNESS

ADMISSION OF PATIENTS TO MENTAL HOSPITALS IN ENGLAND AND WALES

PATIENT may be admitted to a mental hospital, or other premises approved by the Board of Control, (1) as a voluntary patient; (2) as a temporary patient; and (3) as a certified patient.

- (1) Admission as a Voluntary Patient.—The patient has to sign a form of application expressing the desire to be treated as a voluntary patient, with the understanding that, should he desire to leave, he may do so on giving seventy-two hours' written notice to that effect. No other formalities are required. If the patient is under the age of sixteen, a parent or guardian has to sign the form of application which, in this case, must be accompanied by a recommendation from a practitioner specially approved by the Board of Control.
- (2) Admission as a Temporary Patient.—This method also avoids certification, but is only applicable to a patient with a good prognosis who is likely to benefit from the treatment, and who is "incapable of expressing himself as willing or unwilling to receive such treatment." Unfortunately only a small percentage of patients fulfil these criteria.

An application has to be made by the husband, or wife, or near relation, and two medical recommendations are required, one to be signed by a medical practitioner approved by the Board of Control for the purpose, the other, if possible, by the patient's usual medical attendant. The practitioners may examine the patient separately, but within seven days of each other, or together; and the medical recommendations are valid for fourteen days after the date of the later of the two examinations.

The primary period of detention must not exceed six months, but if signs of impending recovery are evident, the detention may be extended, by three-monthly periods, up to a year from the date of admission. (3) Admission as a Certified Patient.—There are four methods of certification in England, and it is convenient to consider them (A) as applicable to private patients and (B) as applicable to rate-aided patients, *i.e.* patients who cannot afford to go to private institutions, but must go to rate-aided hospitals.

(A) FOR PRIVATE PATIENTS .- (1) By Reception Order on

Petition.—Five separate documents are required:—

(a) A petition addressed by the nearest relation to the appropriate judicial authority, usually a Justice of the Peace, especially authorised for the purpose.

(b) A Statement of Particulars, i.e. age, profession, etc.,

of the patient.

(c) and (d) Two Medical Certificates, one of which should, if possible, be signed by the patient's usual medical attendant. The medical examinations must be carried out separately, and must be made within seven days of the presentation of the petition.

(e) The Reception Order, which must be signed by the judicial authority to whom the petition is presented.

- (2) By Urgency Order.—Three documents are necessary, but are all available on one form:—
  - (a) The Urgency Order addressed to the Medical Superintendent, or person in charge of the institution, to which the patient is sent. This must be signed by the nearest available relative.
    - (b) A Statement of Particulars, as in (1).
    - (c) One Medical Certificate.

The Urgency order remains in force for seven days, and during this period the patient may be discharged, or alternatively, he may be certified according to the procedure laid down in (1).

This method has great value when the problem of dealing with the patient is an urgent one, for it avoids the delays that

nearly always attend full certification.

(3) By Summary Reception Order, and (4) By Inquisition.— The former is a method available for non-rate-aided patients in special circumstances, i.e. when found wandering at large, or neglected, or cruelly treated by their relatives. The latter method is hardly ever used, except when large and complicated financial issues arise. Details should be sought in textbooks of medical jurisprudence.

(B) FOR RATE-AIDED PATIENTS (not private) the method is by Summary Reception Order.—The necessary forms for admission comprise an order of a Justice of the Peace, a Statement of Particulars, and one Medical Certificate.

In practice, when a patient cannot afford an institution for private patients, the medical attendant should advise the relatives to notify the Relieving Officer of the district (his address can, if necessary, be obtained from the police). It is well to give the relatives a note to the effect that the patient is a fit case for removal to the observation ward, with a brief outline of the reasons that have led to this conclusion. Such a note is not a certificate. The Relieving Officer authorises the reception into a suitable Public Assistance Institution (Mental Observation Ward) for a period of three days.

#### DISCHARGE OF PATIENTS UNDER RECEPTION ORDERS

Any two members of the visiting committee of the mental hospital, with the advice of the medical officer, may permit any patient to be absent on trial for so long as they think fit. If the patient is rate-aided they may make him a weekly cash allowance while he is on trial. They may also order the patient's discharge after a period of trial, or if the patient has recovered, or on application by a relation or friend who is willing to take proper care of the patient.

#### PROCEDURE IN SCOTLAND

Reception Order on Petition.—This requires five documents: (1) the Petition by a Relative or a Public Assistance Official; (2) the Statement of Particulars of the patient; (3) and (4) two medical certificates. These documents, which are all on one printed sheet of paper (obtainable from the asylum or H.M. Stationery Office) are submitted to the Sheriff, who issues the (5) Reception Order. The medical certificates must be given "upon Soul and Conscience." The Public Assistance Officer of the district can always give help in the matter of procedure. His address can be obtained from the police.

Emergency Certificate.—In an emergency the patient may be admitted direct to an asylum on the application by a relative to the superintendent accompanied by a Medical Emergency Certificate. This authorises the detention of a patient for a period not exceeding three days, during which the usual petition to the Sheriff must be presented and a Reception Order obtained.

Temporary Patients.—There is NO provision in Scotland similar to the English Temporary Treatment without Certification.

#### CERTIFICATION

The reasons for certifying a patient have been summarised as follows:—

- (1) To protect the public from injury.
- (2) To protect the patient from self-injury.
- (3) To give treatment with a view to cure or amelioration which cannot otherwise be given.
- (4) To protect the patient from injury resulting from want of care.

All the documents connected with certification must be filled up with meticulous care, and reasons have to be given in the medical certificate not only for the patient being of unsound mind but also for his being "a proper person to be detained under care and treatment." Certificates should give only plain statements of fact and should be couched in non-technical language. The diagnosis is not required and should not be given. Facts observed by the examiner must be distinguished very clearly from the facts communicated by others. The ideal certificate is one that would convince the most stupid and bigoted member of a jury that the patient was insane.

"Persons signing medical certificates will not be liable to any civil or criminal proceeding if they act in good faith and with reasonable care."

#### CRIMINAL RESPONSIBILITY

A person who is found to be obviously insane at the time of trial is found "unfit to plead" and is not tried. When during the trial of an accused person he is found to have been insane at the time of the commission of the act, the jury shall, if satisfied that he committed the offence, return a verdict of "Guilty but insane." In either case the person may be detained in custody during His Majesty's pleasure.

In dealing with insanity, the Courts follow the rules laid down by the judges in connection with the case of McNaghten, a paranoid patient, who had been tried for the wilful murder of Sir Robert Peel's private secretary. The important points in these rules are:—

- (1) "In order to establish a defence on the ground of insanity, it must be clearly proved that at the time of committing the act the party accused was labouring under such defect of reason from disease of the mind as not to know the nature and quality of the act he was doing, or if he did know it, that he did not know he was doing what was wrong."
- (2) "If the accused labours under 'partial delusions' only, and is in all other respects sane, he should be considered in the same situation as to responsibility as if the facts with respect to which the delusion exists were real."

Modern psychiatry would object to the basic conceptions of both these rules. Thus, the idea of partial insanity contradicts the present view that mental disease is a disorder of the total personality, and it is now believed that instinctual and emotional factors are much more important in controlling a person's actions than are intellectual processes or rational considerations. However, these rules are still applied in Court.

## CIVIL LAW

The question of insanity may arise in all provinces of Civil Law, but only three points will be mentioned here:—

(1) Management of Property.—If a person is apparently unable to manage his property by reason of mental disorder, a guardian may be appointed for him, and the Master in Lunacy is empowered to exercise jurisdiction over the estate of mental patients and, if necessary, to appoint a receiver.

It is possible under Section 116 of the Lunacy Act, 1890, for a doctor, who ought to be the patient's usual medical attendant, to write a certificate to the effect that the patient is incapable of managing his affairs "by reason of mental infirmity arising from disease or age," and this can be made to apply to those who are not certified. This provision is extremely useful for senile patients and for certain other conditions.

"If the patient is lawfully detained the Master is in a

position, if he thinks it desirable, to make an order without requiring any medical evidence."

Curator Bonis—(in Scotland).—An application to the Judge of the Court of Session must be supported by two medical certificates stating that the patient's condition is such that he is incapable of managing his affairs or of giving directions to others.

(2) Testamentary Capacity.—This is not an uncommon question in examinations. The medical man should satisfy himself on the following essential points: Does the patient (1) understand the nature of a Will; (2) the effect of a Will; (3) appear to have a reasonable knowledge of his estate and has he any delusions thereon; (4) has he the capacity to appreciate what dependants, relatives, or friends might reasonably be entitled to his bounty; (5) has he any delusions which would per se cause him to omit any person or persons as beneficiaries, who otherwise might reasonably have been included; (6) has he any delusion which would cause him to make a gift which he might not have made in the absence of such delusion; (7) does he appear to understand the importance attached to his act; (8) if the medical practitioner sees the draft of the will, do the bequests appear to him to be reasonable.

A patient who is certified may possess testamentary capacity and one who is not certified may not.

Divorce.—Insanity can be a reason for divorce and for nullification of a marriage. A petition for divorce may be presented on the ground that the respondent is "incurably of unsound mind and has been continuously under care and treatment for a period of at least five years immediately preceding the presentation of the petition" (Matrimonial Causes Act, 1937). "Under care and treatment" means either certified or a voluntary patient, provided the voluntary treatment follows directly on a period of detention under a certificate.

Nullification of a marriage may take place if either party was at the time of the marriage of unsound mind, or a mental defective, or subject to recurrent fits of insanity or epilepsy. The condition of such a decree is that the petitioner was at the time of the marriage ignorant of the facts alleged. The petition has to be filed within a year from the date of marriage. With regard to nullification no details about the

type or degree of insanity have as yet been laid down; at any rate, certifiable insanity is not the only necessary condition.

All the necessary forms in connection with the legal aspects of mental illness may be obtained from Messrs. Shaw & Sons, Ltd., Fetter Lane, E.C.4, or from the institution to which the patient is to be removed.

The Board of Control, the central authority in England, expresses willingness to provide help and information in tackling questions referring to certification, but is not able to pronounce whether a patient should be certified, though it may question the legitimacy of certification subsequently,

### **APPENDIX**

# PSYCHIATRY ASSOCIATED WITH WAR CONDITIONS

### CHAPTER XV

## GENERAL PRINCIPLES

HERE is nothing specific about the mental breakdowns that occur in war. War-time psychiatric practice does, however, differ considerably from that of peace-time, so that whilst a good deal of recapitulation cannot be avoided, a certain change of emphasis is necessary. The main differences result from the fact that the interests of the community take greater precedence over those of the individual. Not only are men exposed to far more stress, but they are expected to stand up to it and are not permitted to escape.

Before the war the average civilian expected and obtained a good deal of personal liberty and latitude of action. Thus he knew he could leave his job if he did not like it or heard of a better one. He not infrequently did leave his job for one of these reasons and was not punished for doing so. Further, he knew that if unemployed or if he felt himself incapable of working, he would be supported without penalty by the State.

But once a man has become a member of one of the fighting Services a radical alteration takes place in his duties and rights. He has to leave his home and family and give up his profession; he has to embark upon a new and unfamiliar life in which he is subjected to many restrictions and a strict discipline; and he is faced with the prospect or actual experience of prolonged discomfort and acute danger.

It is not surprising that many individuals cannot cope with these demands and that the incidence of psychiatric disorder in the Services should rise considerably in consequence.

The relationship between doctor and patient is also affected in ways which are unattractive to both. In peace-time the first duty of the doctor is to his patient; but in a fighting Service in war-time the first duty of a Service doctor is to that Service. When any conflict arises, his duty to the patient must take second place. Here again the obligations towards and the demands made by the community take greater precedence. It is very difficult and unpleasant for many medical men to adapt themselves to this new and uncongenial but necessary attitude to their work.

It is probable that certain of the psychiatric problems of war-time will continue in the form of "social neuroses" after this war in a way which they did not after the last one. Life is not likely to be so prosperous as it was before, and social changes coupled with economic pressure may well lead the community to demand more of the individual, to exercise a greater degree of compulsion over him, and to permit him less freedom of choice and action. In so far as this is so, certain of the important stresses resulting in the breakdowns of war-time will tend to persist and with somewhat similar consequences.

It is also probable that what are in fact neurotic reactions to economic stress or to the continuance of regimentation in civilian life, will be rationalised as being due to war service and will result in claims for pension and compensation. The war-time orientation of the medical profession as regards the emphasis on its duty to the community rather than to the individual will need to continue in order to deal satisfactorily with problems of this kind.

The greatly increased incidence of psychiatric disorders in the Services in war-time makes a working knowledge of psychiatry even more important than it is in peace-time. Certifiable insanity is not much increased as the result of war stress, and the vast majority of the cases seen are of that less severe kind which are commonly classed as neuroses. Diffidence should not be felt about a lack of experience in dealing with neurotic illness; for the functional states that arise in war are often simpler to deal with than those that are seen in civilian practice, and it is a mistake to suppose that any abstruse or elaborate procedure is usually necessary. For these functional states are essentially situationally determined or reactive. They occur at a more superficial level and have a better prognosis than those that are seen in peace-time. In other words, they are typically determined by external stress, the nature of which is usually tolerably obvious, rather than by internal conflicts, which may be far from obvious. Consequently there is less need for any deep or major psychotherapy of an analytic kind. Finally, these war-time reactions are typically conditioned, coloured or prolonged by hysterical or "escape" mechanism. This is particularly prone to occur, or to become intensified, as the result of hospitalisation, which should therefore be avoided whenever possible. Indeed one of the major functions of psychiatric practice in war-time is to avoid hospitalisation, and one of the major functions of the psychiatrist is to decide what cases should not be taken seriously, in the sense that they do not need it.

There can be no doubt about the importance or frequency of hysterical reactions, or the hysterical exploitation of other symptoms in war cases; there can be equally no doubt that many of the men who develop psychiatric disorders are unreliable and unsatisfactory individuals. Nevertheless a word of warning is necessary against the all too common assumption that all war-time psychiatric cases should be regarded as criminals or malingerers. It is not uncommon to meet the naïve view that the development of a neurosis is reprehensible enough in peace and is doubly so in war; but it is well to remember that a man may be sick as well as being a rascal or a coward, or may appear to be a rascal or a coward because he is sick, and that many war-time cases are neither rascals nor cowards, but excellent men who are sick. In any case, the job of the doctor is to examine and treat the sick, and the question of sin lies outside his province. Thus in many disciplinary cases he should confine the opinion he expresses to the statement that he can find no appreciable evidence of disease. To express the opinion that a man is a bad man is not one a medical officer can express in his professional capacity.

When dealing with neurosis, it is worth while keeping certain points in mind:—

(1) The "breaking point."—Experience in the last war and in this has clearly shown that even the most stable individuals will ultimately crack if exposed to sufficient stress. The amount of stress that can be borne will vary in each individual, depending upon his make-up and the stress to which he is exposed. Now evidence of breakdown is shown by the development of symptoms. It must be realised that

certain symptoms are definite evidence of illness, irrespective of whether the stress experienced has been great or small. Thus in a few cases a condition of insanity of certifiable intensity has been precipitated by calling up and before training has been started. In brief, the diagnosis of psychiatric disorder depends upon symptoms and signs. It is not a diagnosis which can be "justified" only by stress.

As a general rule it can be said that prolonged strain of relatively minor intensity is a greater test than an acute and dramatic stress that is short-lived. A number of individuals start their Service career under a considerable handicap as they bring prolonged strain with them from civilian life in the form of internal conflicts or neurosis. Whether this is so or not, some dramatic happening is often put forward and may be accepted as the cause of a breakdown when it should really be regarded as the last straw or even as a face-saving device. Moreover, the therapeutic prospect becomes better if a man can be made to see his breakdown as intelligibly produced by prolonged strain with a culminating acute stress, itself of minor significance, rather than if he regards himself as a sudden case of honourable "shell shock," producing a semi-permanent aftermath for no intelligible reason and about which he can do nothing.

The absence of the prospect of a respite and what are felt to be inequalities of treatment are aetiological factors of great importance in the production of stress; for men need something to look forward to and are more willing to undergo danger and hardships if they know that others have to undergo them too.

(2) The symptoms shown.—Many psychiatric patients do not complain of mental but of physical symptoms. These physical symptoms are most frequently of emotional origin and often take the form of various organ neuroses. But the presence of definite physical disease or abnormality should not be taken to exclude the presence or predominant importance of psychological or neurotic reasons for reporting sick or the resultant disability. "What! reporting sick with a 'ernia? You keep that till things get 'ot," an old-time rating was overheard saying to a new entry in a sick-bay. Mankind is, however, usually more gifted in self-deception and can relatively seldom achieve such a clear-sighted attitude (which

is not inconsistent with complete bravery in action). The majority of patients, therefore, are genuinely not aware of motives of this kind or are only partially aware of them.

Apart from the size of the sick parade, the best index of

Apart from the size of the sick parade, the best index of the mental health of a unit is shown by the number of defaulters.

Many factors help to cause, aggravate or modify a breakdown.

(1) Personal and domestic factors.—The stress of war, in the sense of discomfort and danger, is not the only cause of neurosis in war-time. Many men who are separated from their homes and families for the first time are extremely homesick, and the wrench from home is particularly hard to bear for those who have led a sheltered existence or who have been unduly dependent. Others continue to suffer from disappointment in professional hopes, and many experience a considerable reduction in income with consequent economic hardships for dependants. These worries may become increasingly aggravated with the course of time or fresh difficulties may arise; and they are not made easier to bear by the knowledge that munition workers are in many respects more fortunately placed.

The domestic situation may thus, as in peace-time, play a most important part, or there may be personal problems of a private character. Once a man has asked for advice and his confidence has been gained, there should be no diffidence about asking intimate questions. At the same time the domestic and personal problems are usually very simple, e.g. fears of infidelity or worry over a wife's pregnancy, and there is seldom need to explore the sexual life in all its details.

(2) General service factors.—The discipline and inevitable restrictions of Service life are often difficult to bear, especially by those who have previously been their own masters or are not so young. Many of the jobs that must be mastered are of a highly technical character, and prove to be beyond the capacity of a large number or are found to be uncongenial. Modern warfare makes great demands in the way of quickness, adaptability and ability in dealing with mechanical contrivances.

Then there are such factors as the physical discomforts, the boredom, the lack of recreation and entertainment, the absence of break when long periods have to be spent without leave, and the want of outlet for the sexual instincts. This seems usually to be felt less keenly than the lack of feminine society and "home life."

Again, difficulties in personal relationships may be most important. The rarity of neurotic illness in certain units or "happy ships" may afford a striking contrast with an undue number to be seen in other units where the basic material conditions are the same.

The strain of responsibility is another frequent cause of breakdown in newly promoted officers and non-commissioned officers, especially when they are getting on in years or arteriosclerosis complicates the picture.

(3) Organic factors.—An excellent illustration of the interplay of multiple factors can often be seen in reservists, for whom the adjustment to the hardships of service life, or the difficulties inherent in mastering new forms and regulations in the office jobs in which so many are placed, may prove to be very difficult. Even mild arteriosclerosis reduces the ability to cope with physical and mental stress and facilitates the development of neurotic reactions; and the same is true of most physical diseases or infections. Convalescence from anything is a dangerous period, and a course of gradual hardening is preferable to a sudden return from a soft life in hospital to full duty.

In others alcohol is a contributory factor, though distinction should be made between excessive indulgence as a cause and as a symptom. Broadly speaking, it can be said that a sudden increase in consumption is in favour of the latter.

The problems of head injury are dealt with elsewhere (p. 124).

(4) Special War-time Experience.—Special war-time stresses, resulting from enemy action, call for no special comment except emphasis on the desirability that, whenever possible, a careful record should be made of what actually happened whenever a case is sent away from the unit. This applies with special force to men who complain of shock or headache following an explosion. These symptoms may be of purely emotional origin or the direct result of definite physical damage; and the subsequent diagnosis and treatment are greatly helped by a record of what was observed at the time. This may also possess crucial relevance in subsequent pension claims.

In connection with war-time experience it may be well to emphasise once more that prolonged strain is a greater test than acute stress, for the tendency is very great to concentrate unduly on the latter. But two years on the Iceland patrol without much leave is really harder to bear than two hours of bombing.

Early Manifestations.—When a patient presents himself complaining of bad nerves, or when symptoms suddenly supervene after special stress, the psychiatric nature of the disability will usually be obvious. The discovery of physical findings or abnormalities does not necessarily exclude this.

But the true diagnosis may be less obvious when what is really a psychiatric condition follows a gradual accumulation of minor stress over a long period. These cases fall into two main groups:—

(1) Disorders of conduct obvious to others but not complained of by the patient himself. These are often regarded as disciplinary rather than as psychiatric questions. Certainly not all disciplinary shortcomings should be regarded as psychiatric issues. But when any man, whether an officer or not, who previously had a blameless character, or who has been conscientious, hardworking, trustworthy and willing, suddenly becomes unreliable and begins to get into trouble for inefficiency or for disciplinary reasons, the possibility of a psychiatric illness should be borne in mind. Frequent manifestations of this kind are: slipshod work, neglect of personal appearance or failure in smartness, a truculent or surly manner, increased consumption of alcohol or cigarettes, irritability, outbursts of bad temper, moodiness, restlessness, a tendency to become solitary or asocial, and a falling off in activity and interest.

Attention should not so much be paid to the abnormality of behaviour in itself as to the contrast that is shown with the patient's previous personality and behaviour; hence the necessity that a medical officer should know his men.

(2) Various physical complaints, not, in fact, evidence of bodily disease, the most common being headaches, indigestion, loss of appetite, general fatiguability, poor sleep, palpitations, shortness of breath, dizziness, and frequency of micturition.

#### CHAPTER XVI

# THE EXAMINATION OF SERVICE PATIENTS

T is essential to obtain independent accounts from as many sources as possible in order to supplement and to invest the patient's own story; and to do this may save a lot of time. It is also essential to examine psychiatric patients privately; for men cannot be expected to talk freely when all they say is overheard by others. It is also impossible to make a satisfactory psychiatric examination if a patient thinks he is being jeered at or laughed at, or if the interview starts with the assumption that he is probably malingering. "Catching out" a patient is neither difficult nor a sign of shrewdness.

The bare outline of a psychiatric history requires some knowledge of

- (a) The nature of the complaint; date of onset or exacerbation, and coincidence with any special cause of strain or worry; sequence of development of symptoms.
- (b) Family history as regards both physical and mental health.
- (c) Past history: whether nervous as a child, and if so in what way; standard reached at school or school record; subsequent work record; reasons for change of job; health; how often off work, for how long and why; service record; domestic worries; interests and how spare time is employed; keenness on games.

#### ASSESSING THE RESULTS OF A PSYCHIATRIC EXAMINATION

The personality of the patient, comprising as it does his intelligence, character and temperament, is of paramount importance; and the significance of symptoms varies enormously according to the personality setting in which they occur.

The following points may, however, be borne in mind as rough guides in deciding on treatment and disposal:—

(a) The more insidious the onset, the less likely is the case

to respond to simple measures. The best evidence of a more serious outlook is not so much shown by the severity or acuteness of symptoms as by their persistence.

(b) The standard reached at school gives a very fair idea of the patient's intellectual level. A psychiatric breakdown is often caused or complicated by the fact of mental backwardness. (A further discussion of this large and most important group will be found in the section on mental deficiency.)

- (c) The past work record is the best index of the patient's stability. The importance of constitutional predisposition as opposed to external stress is usually greater when there is a history of previous breakdowns after exposure to relatively trivial stress in civilian life; and it is important to remember that a change of job may have averted this, so that changes of job may possess the same significance.
- (d) A man's stability is more important than his intellectual capacity in determining inefficiency and breakdown, unless the intellectual level is extremely low or he is placed in a job which makes excessive intellectual demands.
- (e) One should be chary of the diagnosis of an uncomplicated hysterical reaction when there is loss of weight, sleep and appetite, or when other objective physical signs of anxiety are persistently demonstrable. These are, of course, evidence of an affective syndrome.
- (f) Some more severe form of psychosis should be suspected when there is evidence of "ideas of reference," *i.e.* when a patient believes he is being watched or discussed, when this goes beyond merely heightened self-consciousness and is expressed as a definite belief.
- (g) In doubtful cases a family history of definite mental illness is suggestive of a serious illness or psychosis.
- (h) Any talk of suicide should be taken seriously, especially when associated with mood changes which are persistent. The belief that patients who talk of suicide do not do it is a mistake.
- (i) The presence of hallucinations and delusions should always arouse suspicion of schizophrenia, especially if associated with "dreaminess," fatuous smiling or giggling for no apparent cause, or queer, impulsive behaviour. The belief that the mind can be read or is under some outside control is almost diagnostic of schizophrenia.

- (j) The likelihood of an arteriosclerotic factor is increased when the past history is negative and when the patient is getting on in years. Organic mental symptoms, i.e. mental symptoms due to alcohol, arteriosclerosis, etc., are (i) "emotional lability" (unstable mood); (ii) impaired memory, especially for recent events, and (iii) slowness of comprehension going on to slight confusion.
- (k) Memory can readily be tested by asking the patient to repeat a series of numbers, starting with a small number such as 8276 and saying them distinctly and slowly. The number to be retained is then gradually increased. The normal individual can retain and repeat immediately at least six, and should repeat seven or more. Another useful test is to ask the patient to multiply, say, five by seven, then give him two sets of five digits to retain, then ask again what was the previous sum. Another excellent test is to ask patients to subtract seven serially from 100 (93, 86, etc.). Gross failure in these tests should suggest organic intellectual deterioration or mental defect, provided the patient is fully co-operative.
- (1) Headache of "functional" type as opposed to one of organic origin tends to be a general sense of discomfort rather than a pain, and is affected by emotional rather than by physical or postural factors. Subjective complaints of difficulty in concentration may be made, but objective evidence of memory impairment cannot be found. Nor are functional headaches so often relieved by aspirin.

#### CHAPTER XVII

## CLINICAL SYNDROMES

OST cases illustrate two main syndromes: (1) affective, comprising cases in which the mental and physical symptoms of either anxiety states or depressive states are the main features; and (2) hysterical, in which "mental and physical symptoms, not of organic origin, are produced and maintained by motives, never fully conscious, directed at some real or fancied gain to be derived from these symptoms."

These two syndromes—affective and hysterical—are relatively seldom seen in pure culture and usually co-exist in varying proportions. The distinction between them is, however, of fundamental importance since the treatment differs.

- (1) Affective Syndromes.—Here again intermediate or mixed forms often occur, and a case may change rapidly both in the severity of the symptoms and in the type of reaction that is shown. Thus states of severe depression may start as mild anxiety states.
- (a) ANXIETY STATES.—To recapitulate briefly: anxiety states show an exaggeration of the fear mechanism and present not only the mental manifestations of fear but also the bodily signs. Anxiety states may occur because of constitutional predisposition or because of specially severe stresses, both physical and mental.

It must, of course, be realised that most people develop some anxiety symptoms when exposed to special stresses, such as bombing or before an attack. The diagnosis of an anxiety state, as opposed to the mere presence of anxiety symptoms, should therefore be made only when anxiety symptoms are abnormally intense, and above all when they are abnormally persistent.

Physical symptoms.—Some patients show the whole picture of fear uniformly, but most do not, and this gives rise to a common error in diagnosis. Thus, when only one component, such as tachycardia, is present the case is apt to be ascribed

to some localised physical condition. The concurrent presence in some degree of the other physical signs of fear should give a clue to the truth, and the presence of certain physical signs which cannot be imitated voluntarily is the best criterion. It is wise therefore to exercise caution before diagnosing an anxiety state unless one or all of the following signs are present: pallor, drawn facies, dilatation of the pupils, flushing, sweating, tachycardia, *fine* tremor and consistently very brisk reflexes, particularly in the arms. The presence of anorexia, loss of weight and poor sleep provides confirmatory evidence of great value. In brief, anxiety states often present the picture of mild hyperthyroidism, and this can develop as a sequel.

Mental symptoms. — These may vary from generalised feelings of tension and apprehensiveness to acute panic. The majority complain of difficulty in concentration and headache. Many cases suffer from war dreams or nightmares. Many will not admit that they are afraid because they are ashamed of it; fears of showing cowardice or of "losing control" or of insanity are very common. In many the anxiety is displaced and focussed on some physical symptom, anxious preoccupation over bodily health alone being admitted.

When the stimulation is acute and prolonged, as the result of enemy action, the anxiety reaction, by reason of its intensity and abrupt onset, may amount to a state of panic. This may take the form of wild, impulsive action or even blind flight; or the patient may be frozen into a state of pale, speechless trembling immobility, often associated with a mask-like or Parkinsonian facies. Pill-rolling movements of the fingers may even be seen. A state of bemused apathy is not uncommon after prolonged bombardment or bombing, and this may go on to a stuporose reaction, more frank anxiety symptoms developing only later. This is a highly suggestible condition in which hysterical conversion symptoms are liable to occur.

(b) Depressive States.—The importance of the constitutional predisposition is greater. Depressive states are very liable to develop in conscientious men of good character, especially when their resistance is lowered by early arteriosclerosis. The onset is usually insidious and acute states of depression seldom result suddenly from severe external stress.

Here again the symptoms are both physical and mental; the former including loss of weight, of sleep and appetite, and diminution of sex desire; and the latter comprising low spirits, "retardation" (a slowing down of spontaneous physical activity and in the rate of mental response), irresolution, difficulty in concentration, occasionally continuous feelings of unreality, and above all, feelings of inadequacy and ineptitude going on to definite self-reproach. Men with depressive states also look consistently depressed, although the cloud may lift a little in the evenings.

Mixed states of anxiety and depression are extremely

common, as has already been pointed out.

(2) Hysterical Syndromes.—Hysteria essentially arises from the fact that a patient seeks refuge from an unpleasant situation by the development of some disability, either physical or mental. In other words, there is an attempt to "escape" by the development of illness. Hysterical reactions differ in varying degree from downright malingering and the dividing line is often very thin. Malingering is often seen as an initial phase, but the consciousness of the intention or motive to escape from the unpleasant situation soon becomes suppressed. When this occurs, treatment is much more difficult, and this is one of the reasons of the immense importance of early treatment.

early treatment.

It will readily be understood that hysterical (escape) mechanisms may be added to or prolong symptoms of an affective type, or the symptoms of any physical illness, i.e. the patient may exploit any symptom hysterically.

Physical symptoms.—In a typical case these correspond with the man's ideas and not with physiology or pathology, resulting in the classical conversion symptoms of functional paralysis and anaesthesia. These are relatively rare and hysteria more commonly is manifest in one of the numerous "organ neuroses."

Amongst the most common physical expressions of this kind Amongst the most common physical expressions of this kind may be mentioned headaches, functional vomiting, certain functional dyspepsias, aerophagy, and a large number of "fits and faints." In certain of the last, over-breathing may result in alkalosis with the symptoms of hyperventilation tetany leading even to loss of consciousness. Such attacks can usually be readily cut short by making the patient hold his breath. The time-honoured expedient of dousing an hysteric

with cold water results in a sudden intake of breath followed by a pause and produces the same effect.

Mental symptoms.—These are protean and are often expressed in a histrionic manner, so that the impression is given of a lack of genuineness. Care must, however, be taken not to assume too readily that this is so. Hysterical patients often show a lack of correspondence between their complaints and their performance. Amongst the most important mental symptoms may be mentioned fugues or "loss of memory," particularly prone to occur when a patient has got into difficulties or at the end of his leave. Many of these losses of memory are near the malingering end of the hysterical scale, and it is often possible to restore the memory without much difficulty, especially if the patient is dealt with quickly.

#### SUMMARY OF AFFECTIVE AND HYSTERICAL SYNDROMES

In spite of the fact that they often co-exist, the broad distinction that has been made between affective and hysterical syndromes is justified on clinical and therapeutic grounds as well as by the type of personality that tends to be affected. It is a distinction which assumes fundamental importance in war-time psychiatry.

The symptoms in the affective group are evidence of a psychosomatic reaction of the whole organism in a way which hysterical symptoms are not. Thus, objective physical findings such as loss of weight and tachycardia are to be observed. These are the involuntary accompaniments of emotional disturbance. It is, of course, possible to argue that certain of these symptoms, such as tachycardia, are biologically purposive, and to invoke the work of Cannon in support of this; but in pure affective states they are not personally purposive and are in no way desired by the patient either consciously or unconsciously. Affective symptoms are not of a type that can be produced by voluntary effort. Moreover, in affective states, as opposed to transient affective symptoms, they acquire a certain autonomy and are persistent. Finally, they cannot be abruptly terminated by changes in the environment or by environmental measures.

It may be found helpful to regard pure affective symptoms as impersonal symptoms, which in themselves are essentially

outside the patient's control, just as are the ordinary symptoms of physical disease, although, as in physical disease, the patient can to a certain extent control his attitude to them and the degree to which he lets them influence his activities.

In contrast, the symptoms in hysteria are not such as occur as the universal involuntary accompaniments of emotional disturbance. They are either of a type that correspond with mental conceptions rather than those which result from the operation of physiological mechanisms, or they are of a type that can be imitated by voluntary effort. They are not typically so persistent; and they are very much more modifiable by environmental changes and measures. They are not symptoms which are in any sense impersonal, and any change in the attitude of the patient is invariably reflected in them at once. Hence their tendency to fluctuate in intensity according as to whether or not the patient pays attention to them, which accounts for their apparent inconsistency.

It has already been emphasised that these two types of reaction—affective and hysterical—frequently co-exist. The readiness with which a patient will succumb to, or will utilise in an hysterical way, the symptoms of an affective disorder will of course vary according to his attitude and personality. Broadly speaking, it may be said that the better type of individual, with a high sense of duty and morale, if he develops an illness as the result of war stress, will tend to develop an affective reaction. Many of these men do not report sick, but struggle on in spite of their symptoms until they are sent sick. On the other hand, men with poorer personalities and with a less strict sense of duty and lower morale tend to escape by the development of a purely hysterical reaction before any affective symptoms have become manifest as the result of stress, or succumb to affective symptoms of relatively minor intensity.

Now since the affective group do not respond to environmental measures in the same way or to the same extent as the hysterical, the relative proportion of affective and hysterical features is of fundamental importance in determining how much firmness should be shown, the possibility of a response to semi-disciplinary measures, and whether a man should be kept at duty or not. To keep a man at duty with a severe affective syndrome will only make him worse.

#### OTHER SYNDROMES

Any type of psychiatric syndrome may be met with in wartime as in peace-time; but in war-time they do not present any special features except for the tendency to be coloured by hysterical features, like all other war-time cases.

Manic states rarely result from war stress, which is rather surprising since mild hypomanic symptoms, in the form of elation and over-talkativeness, are of such frequent occurrence after any exciting experience. Occasionally, rather unusual manic pictures, without elation but with a striking predominance of paranoid features, may be seen. This type of reaction tends to occur especially in officers with personalities of the "high-powered salesman" type who are especially intolerant of what they feel unnecessary restrictions and red tape.

Schizophrenic reactions are often of an episodic variety and seem to possess on the whole a better prognosis than in peace. Organic reactions frequently facilitate the development of affective and hysterical syndromes.

### PSYCHOPATHIC PERSONALITIES

Although the possession of an abnormal character does not in itself constitute a psychiatric syndrome, it certainly does provide a frequent setting in which psychiatric syndromes develop.

A large number of war-time cases must be regarded primarily as psychopathic personalities, and they are the cause of a great deal of difficulty. As in the case of mental deficiency (q.v.)—the two are often combined—the more aggressive types come under observation because of disciplinary problems, whilst the less aggressive types report sick.

An important group is formed by the constitutionally timid, in many of whom what appears to be an instinctual defect, as shown by a constitutional lack of aggressiveness, is clearly demonstrable permeating their performance throughout life. These people do not respond to toughness.

Constitutional inferiority is not only shown in the psychical sphere, for temperamental defects are often combined with evidence of biological inferiority, as shown in the weedy physique. Certain organ neuroses, such as effort syndrome, are particularly liable to occur in a psychosomatic setting of this type.

Psychopathic personalities may develop any type of syndrome, more frequently hysterical, less often affective. A

combination of both is frequently seen.

Psychopathic reactions are characterised by their transient, episodic, and often explosive character, and by their reactivity to environmental factors. The storm may be very violent whilst it lasts, and may take the most diverse forms—loss of temper, impulsive conduct, fits of depression and uncontrolled weeping, suicidal attempts, fugues—but it is usually soon over, although it may readily be provoked again. It is important to remember that psychopathic episodes often punctuate the course of an affective syndrome which is quite genuine and persistent.

War-time restrictions and stresses are naturally particularly well calculated to bring out any psychopathic tendency that may be present, and which may not have been manifest previously had the patient been fortunate in his life. The more severe degrees of psychopathy are, however, usually shown very clearly in the past history and their presence always makes

the outlook worse.

#### THE MORON IN WAR-TIME

The war has opened the eyes of the medical profession to the magnitude and difficulties of the social and other problems produced by the high-grade mental defective or moron, whose deficiency in mother wit is so readily shown up by the demands made by life in one of the fighting Services. It may be hoped that the sensitisation of the medical profession to these problems will remain after the war is over.

Many morons are admirable people within their limitations, and are capable of making the most valuable contributions to the community if placed at tasks which are not beyond their capacity. And, indeed, the world could not easily get on without those who are best suited, and are content, to be hewers of wood and drawers of water. But morons are slow at learning, and experience difficulty in adapting themselves to new situations which they cannot readily grasp. They tend to be

naturally deficient in foresight and to yield to the passing temptation of the moment so that they are easily led astray. Many of the problems of life necessarily present greater difficulties to them then they do to those who are not similarly handicapped, and even when morons appear to be carrying on quite well, their margin of reserve is less. Contrary to popular belief, morons tend to be more unstable than their more intelligent brethren. It is not difficult to understand why this should be so; for they readily become, so to speak, intellectually out of breath, and instability and lack of control are frequent accompaniments of mental backwardness.

It was therefore inevitable that many morons should find the demands made by life in one of the fighting Services too much for them. The manifestations are fairly characteristic. The more stable simply appear to be slow and clumsy and little else; the more unstable, when pushed by circumstances, tend either to commit some offence or to go sick.

A surprisingly low grade of intelligence as judged by tests is compatible with the efficient performance of many of the humbler duties in one of the fighting Services, so long as it is not complicated by instability. For example, it is possible for an individual to pass without comment in the Navy as an ordinary seaman or stoker with a mental age of ten years or even lower; and many individuals with mental ages between ten and eleven years are capable of excellent work. These interesting facts serve to show that even at the lower levels character is more important than brains for social efficiency.

The unstable moron of more aggressive type tends, however, rapidly to come up against authority or to indulge in anti-social acts. A continuous history of petty crime or repeated offences against discipline should, therefore, always suggest the possibility of mental defect, especially when the crimes reveal a lack of prudence and foresight, so that the perpetrator is almost bound to be caught. Unstable morons also often escape from difficulties by desertion, which is characteristically carried out as the result of a sudden impulse, the reasons given subsequently often seeming to be wholely inadequate.

The majority of morons do not, however, attract notice because of aggressive actions of the above type, but because of various hypochondriacal complaints. Medical officers often observe that dull and inefficient soldiers provide their most regular clientele at sick parades, many complaining of digestive disturbances or of queer or vague sensations of a generalised and unconvincing character. Mental deficiency should also be suspected in those suffering from repeated venereal infections, a liability to these conditions being often indicative of lack of care, prudence and foresight.

In the diagnosis of the moron a question or two about the school record provides a starting-point. The school nomenclature varies in different areas, but the presence of a significant degree of deficiency is probable if, on leaving school at the age of fourteen, the subject had not risen higher than three classes from the top (i.e. was in standard 5 or below). It is, of course, necessary to make sure that much schooling was not missed owing to illness or other reasons, or conversely that the subject had not been promoted beyond his deserts because the teacher did not want him to remain with younger children. This practice is on the increase. A few more questions about the patient's work record and income should make the diagnosis probable. Many of these cases give a previous history of instability, as shown by a poor work record, but a large number do not. But even when they had been able to find a suitable niche for themselves in their pre-war life, this was usually in odd jobs or in the lower ranks of unskilled labour. Morons form the lowest income group and tend to become readily unemployed, being the first to lose their jobs when the labour market contracts for any reason. The more unstable simply leave their jobs and go on the dole when dissatisfied or upset for what may seem the most trivial reason. That a man's mess-mates consider him dull is a particularly significant pointer.

Finally, questions may be asked about matters of every-day knowledge. A short conversation about the front page news should enable the doctor to form a fair estimate of the patient's intelligence, although he should bear in mind that he is more likely to under-estimate it than to over-estimate it as the result. The amount of general information that can be expected in the general population tends to be grossly over-estimated by most educated people. The Binet vocabulary is the most valuable single test that can be given

quickly. It shows a very high degree of correlation with the complete Binet test as given in full. It is convenient to get it typed out separately on a card which can be carried in the pocket-book; the laws of copyright forbid that it should be given here. The Kent Oral Emergency test can also be recommended for the rapid examination and assessment of morons of not too high a grade, but the normal adult feels insulted by being asked many of the questions it contains.

The diagnosis of feeble-mindedness should also be suggested by certain types of breakdown, characterised by a mood which is shallow and inconsistent as well as by the fact that the history frequently discloses that the breakdown has been precipitated by very simple stress. In brief, these breakdowns are often very childish and naïve and are very readily affected by changes in the environment. Frank hysterical conversion symptoms are frequently seen, the psychogenesis of which is often patently clear. Morons are also liable to short-lived psychotic episodes of an anomalous type which occurring in a more intelligent individual would be strongly suggestive of a schizophrenia. Thus confusion and hallucinosis may be shown and paranoid ideas are very common. These "defective psychoses" have usually a good prognosis.

The outlook for defective reactions of all kinds is usually

The *outlook* for defective reactions of all kinds is usually extremely good, taking a short-term view. They readily respond to environmental measures. The probability of a relapse must be assessed in the light of the previous personality and of the stress to which the individual has been exposed. The treatment essentially consists in providing an environment that is not beyond the individual moron's capacity, and in one of the fighting Services this frequently means a transfer to a simpler job or even discharge in the more severe or unstable cases.

Owing to the fact that tests for intelligence are of such a limited value in predicting social efficiency, except at the low end of the scale, the exclusion of morons from acceptance to the fighting Services presents great difficulties. Group intelligence tests provide only a rough initial grading which should always be supplemented by individual examination.

### CHAPTER XVIII

# MANAGEMENT AND TREATMENT

HE range of treatment that is practicable outside the walls of a hospital is certainly limited, but can be extremely effective. It is essential that as many men should be kept at duty as possible, and the danger of contagion is very great if men observe that mild neurotic complaints result in reference to hospital. Moreover, one of the worst things that can happen to an hysterical individual is to be permitted to make a successful hysterical "escape"; for once this has been achieved, similar reactions are very liable to occur when fresh difficulties in life arise. In war-time the risks which are always attendant upon hospitalisation become greatly intensified. These points need emphasis because it is obviously the line of least resistance to evacuate to hospital all cases of functional nervous disorder. Such a course will clearly rid the unit of unstable or unsatisfactory individuals. Yet, if this is done in war-time there is a great risk of producing epidemics of neurosis; it would clearly be inadvisable if every man who felt fed up and frightened could secure for himself an easy evasion of duty under the honourable diagnosis of an "anxiety state." Moreover, resistance is raised when men know they have their backs to the wall. It therefore behoves the medical officer, in fairness to those who are endeavouring to do their duty in the face of danger and discomfort, to make a most careful selection of cases rather than to send into hospital all and sundry. Again, the decision to make a recommendation for transfer to a less exacting branch or unit should whenever possible be made whilst the man continues at duty. Here once more there is the danger of the necessary and legitimate trickle becoming a flood should alternatives be too easy or attractive. Only a minority of men are most suitably placed in really soft jobs, although a number are better placed in different ones; and in the Navy, at least, the ability of neurotics and dull men to remain usefully at duty has been a matter of repeated surprise; nor have the necessary concessions as regards the nature of the duty (e.g. shore service only) been so numerous as might have been expected.

Patients, therefore, should whenever possible be kept at duty, being helped at the same time by talks, reassurance and medicaments. The next stage is to treat the patient in the equivalent of a sick-bay (if this exists) in the hope of quickly refitting him for duty. In doubtful cases it is often possible to seek the opinion of a psychiatric specialist. Evacuation to the equivalent of a base hospital should only be done for special reasons or if other measures fail.

## TREATMENT ON ATTENDING LIST

An oncoming neurosis can often be greatly relieved in several ways and by quite simple psychotherapy: by getting the patient to discuss his troubles; when there are physical symptoms (i.e. indigestion, headache, etc.) by explanation, with familiar physiological illustrations, of the effects of emotional disturbance, coupled with reassurance about the lack of serious physical significance of the symptoms experienced; and by explaining that in certain circumstances fear is natural and not a thing to be ashamed of, but to be faced and its effects controlled. ("Pep talks on pride" must, however, be done sympathetically and with the minimum suggestion of contemptuous superiority.)

A judicious firmness is called for when hysterical features ("escape mechanism") predominate; and indeed the proportion of firmness to sympathy should depend directly on the amount of hysteria present. On the other hand, sufferers from affective syndromes need and can greatly benefit from all the sensible sympathy that can be shown them. It is not a question of what men "deserve," but what works.

Great relief can also be obtained from sedatives. It is surprising what benefit can follow a good night's sleep or a series of these. Nembutal (one or two capsules on an empty stomach) is an excellent drug, for it acts quickly and seldom leaves much hang-over. It is specially indicated in those whose minds race, or revolve round the day's happenings, so that they cannot get off to sleep. Veronal (gr.  $2\frac{1}{2}$  twice or thrice

daily) is often of great value in relieving states of tension. It can be taken more easily than a bottle of medicine, but individual susceptibility varies. Small divided doses of luminal produce the same effect; or it can be used in large doses as a sedative at night. Nor should the old bromide-chloral mixture be neglected.

A temporary change of duties may be desirable to help a man over a difficult period, and much can also be done by explaining the position to others, so that a man may for a time be let down more lightly; hints to the reverse effect may also be indicated.

Treatment in the sick-bay or its equivalent.—This may be called for in more severe cases of anxiety, when a few days' rest in bed combined with sedatives may be of the greatest benefit and enable the patient to resume duty; and it may, or perhaps must, also be used for more severe cases pending their evacuation to a base hospital.

Evacuation to hospital.—This should be considered when there is evidence that the case is of a more serious nature, according to the criteria that have been laid down, e.g. symptoms of a severe affective syndrome; when there are physical factors which need investigation (which is less frequently the case than is commonly supposed); or when the patient does not respond fairly rapidly to routine methods of treatment.

When a case is referred to hospital or for a specialist opinion, facts rather than inferences should be given in the medical report that accompanies him. This should, if possible, not only include any special stresses or strain to which he has been subjected, but should also give some indication of his previous personality and character and what others think of him.

A patient should always be told why he is being sent to hospital or why he is being kept after he has been sent there. Nothing is worse for neurotics than continued uncertainty as to whether they have some physical disease or not, and many are apt to harbour morbid and even fantastic forebodings which can be settled at once.

#### TREATMENT IN HOSPITAL

The methods do not differ in any essentials from those available in peace, except that occupational therapy and

rehabilitation by work assume greater importance and the scope for major psychotherapy is less.

The social prognosis for war-time cases is usually excellent: the vast majority show a remarkable improvement as soon as they know they will be invalided or improve rapidly after invaliding; but men are equally apt to persist with symptoms so long as any doubt remains. When therefore it has been decided that invaliding is inevitable, it should be done as soon as possible.

The basic difficulty in treatment and disposal is the same as in all war-time cases: whether to return to duty a man liable to prove unsatisfactory and to relapse, or by invaliding such cases to make escape too easy, thus creating a bad precedent. The provision of various modifications of duty within the capacity of different individuals and still within the Service is the least unsatisfactory solution of this impasse.

A striking lesson of war-time is how adaptable men are and how much they can stand rather than the converse; prognosis is apt to be falsified in the direction of being too gloomy. A the same time a substantial proportion of men are seen at base hospitals for whom retention in the Service in any capacity would be senseless—such as certain unstable defectives and sufferers from a pronounced degree of psychopathy with superadded reactive depressions. Whenever possible it is desirable to invalid people without admission to hospital.

The longer the stay in hospital the more dubious becomes the outlook, and psychiatrists are apt to see cases who have become hopelessly hospitalised as the result of misguided determination to exclude any possible physical abnormality before reference is made. Reference to a psychiatrist should not be made as a last resort, but neither should it be made as a first step. Many minor psychiatric problems can and should be treated by general physicians and surgeons. Indeed, reference to a psychiatric specialist can be positively harmful by impressing the patient with a false idea of the seriousness of his condition, when a sensible explanation and reassurance coupled when necessary with rehabilitation are all that is really required.

The presence of a positive family history, an insidious onset, or a breakdown as the result of relatively trivial stress, a serious degree of psychopathy, or marked mental defect, marked hypochondriasis, and the early development of

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hysterical symptoms and prolongations, all make the prognosis more dubious; whereas those with good personalities who break down as the result of severe stress, preferably not connected with the war—such as domestic difficulties or bereavements—offer the best outlook. The prognosis as regards return to full duty depends far more upon the previous personality and the attitude of the patient than upon anything else.

As regards psychotherapy, the elucidation of buried or "repressed" memories is of value only in a small minority of cases, far fewer than a perusal of the war literature would be inclined to suggest. A lot of harm can be done by encouraging men to go over their painful experiences time and again, and it is often better to encourage them to let sleeping dogs lie after they have had an opportunity for carefully controlled exercise, and then to concentrate on re-shaping their attitude towards their symptoms and on more constructive steps for the future.

One of the main difficulties is to decide when the symptoms of an affective type of reaction are being replaced by hysterical manifestations and prolongations, and to reinforce sympathy with the extra pressure and firmness that is then called for. The patient must be led to regard residual affective symptoms or anxiety tendencies as certainly a handicap, but not an insuperable one. Too much pressure, either by sending a man too quickly into hospital, or by sending a man too quickly back to duty, may result in a relapse; or may precipitate a severe affective reaction in an hysterical or psychopathic individual. The question is never what a patient "deserves," but what he can do; and although on occasion it may be necessary to be cruel to be kind, therapeutic attempts cannot be regarded with satisfaction when they make a man worse. The fact must be faced that the "ceilings" of performance of certain men is very low and that no form of treatment will raise this.

Two forms of treatment which have proved of special value in war cases must be considered in greater detail. They are (1) continuous narcosis; and (2) narco-analysis.

(1) Continuous Narcosis.—This is the method of choice for

(1) Continuous Narcosis.—This is the method of choice for all acute cases of recent onset, especially those that supervene after enemy action.

It is obviously advantageous to have a method of treatment

which makes a man quiet quickly and can keep him so; but quite apart from this, the benefit that can be derived is very striking. There can be little doubt that the early institution of continuous narcosis, by removing both the memory and the experience of the more acute phase, not only makes the patient far more comfortable, but can abort what would have been a more prolonged and severe illness. Thus, it enables the somatic and psychological components of an affective syndrome to settle without the experience of them being burnt in upon the sufferer, whereby his self-confidence may be shaken permanently.

Various techniques are available. The first essentials are quiet and careful nursing. A single room or a small ward dedicated to this special purpose are preferable; but if necessary, screens round the bed in an ordinary ward can serve if there is not too much noise. The room should be kept darkened, save during meal-times and for nursing purposes, when a subdued light is necessary:

Before the treatment is started the bowels should be well opened, if need be by enema. An initial dose of morphia gr.  $\frac{1}{4}$  to  $\frac{1}{3}$  and hyoscine gr.  $\frac{1}{100}$  is given, and sleep can usually be maintained by oral or rectal administration of paraldehyde in 2-drachm doses. Two or three of these maintenance doses of paraldehyde are usually called for in each period of twelve hours. The doses are so spaced that the patient wakes up or is easily roused at meal-times, and he should then be able to feed himself and to empty his bladder. A blanket bath is given daily. The patient is allowed up to defecate, but should be accompanied as he may be rather drunken and fall. If the bowels are not opened naturally, an enema is given on alternate days. A careful record must be kept of the fluid intake and output, and from three to five pints of glucose drink should be given daily. The urine must be tested regularly for albumen sugar and acetone, and the blood pressure should be recorded each day. A four-hourly temperature and pulse chart must be kept, together with a chart recording the hours of sleep and the times at which maintenance doses are given.

The aim should be to obtain 18 to 21 hours of sleep out of the 24. Should the duration of sleep under the above paraldehyde regime not prove to be satisfactory, a morning and evening dose of paraldehyde may be replaced by 20 to 30 minims of somnifaine.

Paraldehyde, although it has an unpleasant taste, has many advantages, as it seldom produces toxic effects; but some workers prefer sodium amytal gr. 3 three or four times daily as the basic sedative, or intramuscular injections of 2 c.c. somnifaine twice daily, or 30 minims of somnifaine two or three times daily by the mouth, doses of paraldehyde being added only when necessary. Others, again, prefer intramuscular injections of luminal (gr. 1 to 3) supplemented by paraldehyde. Repeated doses of hyoscine usually produce mild delirium rather rapidly and cannot be recommended.

The duration of the course should seldom be less than three days and is usually continued for ten days, or even more. The desirability of continuation must be judged from the condition of the patient when allowed to emerge from sleep.

Mild cases will not need so much sedation, and the ensurance of even one night's good sleep will often work wonders.

The most common complications are vomiting (which may be merely due to injudicious timing of the administration of paraldehyde after a meal), a rise of temperature, and a fall in blood pressure. These are indications for withdrawing the maintenance doses until the patient's condition has returned to normal, after which the treatment may be started again cautiously. Should the toxic symptoms recur, the treatment must be abandoned. Certain patients of course show a special susceptibility to particular drugs, and it may be wise to try a different one.

Advantage should be taken of the increased suggestibility of the patient during his half-waking state for psychotherapeutic measures. Reassurance is often doubly effective in this condition, and some patients can with benefit discuss experiences which would be too painful for them were they fully awake. Yet, although such an opportunity for the controlled ventilation of pent-up feelings may be valuable, patients should seldom be pressed for their stories, however fascinating these may be in war-time to the listener.

In really acute cases, continuous narcosis should be instituted as soon as possible after a physical examination has been made; and it is often best only to take a most sketchy psychiatric history and to postpone a full examination until after the sleep treatment has been completed. The physician naturally wants to know as precisely and fully as possible what he is dealing with; but many of these patients need immediate oblivion and should be given it as soon as may be. One further point may be mentioned: in the more chronic cases, where anxiety and agitation are not so severe as to demand immediate narcosis, it is convenient to begin the treatment at the patient's usual bed-time. He then goes to bed ready for sleep, and it is often possible to begin the narcosis with a maintenance dose of paraldehyde.

(2) Narco-analysis.—The main indication for narco-analysis is a psychogenic symptom or syndrome whose origin and nature are not obvious to doctor and patient after a reasonably extensive inquiry and ordinary persuasion (Mallinson). In some cases the psychiatrist seeks enlightenment, in others the patient is helped in the acceptance of explanations and memories which previously aroused resistance.

Narco-analysis is essentially a time-saving device, and the success achieved seems to depend very largely on individual interest, aptitude, and faith.

Certain workers have found it of special value in the elucidation of hysterical fugues and amnesias; in the assessment of the sequelae of head injuries, by the discovery (or failure to discover) hysterical motivations for continuation of symptoms; and in the assessment of "fits and faints." Again, narco-analysis may help in disentangling organic and psychological factors in certain gastric cases, and in the differentiation of psychogenic from constitutional and endogenous disorders. The heightened suggestibility whilst under the influence of sodium amytal may also be used for giving suggestion and removing conversion symptoms. To be effective this must be done before habituation has occurred.

Several interviews are desirable before the analysis is made in order to prepare the ground and to arouse expectation of success. The patient should be brought into a quiet sideroom which is not too brightly lit where he can remain to sleep for some hours after the injection. A 10 c.c. syringe is necessary, and the freshly prepared solution is injected intravenously at the rate of about 1 c.c. per minute, the dose of sodium amytal required before the period of maximum accessibility is reached varying from  $3\frac{1}{2}$  to 12 gr. with an

average of just less than two ampoules or 71 gr. Whilst the injection is being given, the patient is told to close his eyes and to begin to count slowly backwards from 100. The syringe is kept in position so that a further injection can be given should the patient become too "light." The analysis can be continued if necessary for more than an hour. As has been suggested, success depends upon obtaining a satisfactory rapport, and this is very largely an individual gift.

A false judgment can often be formed as a result of the artificially induced euphoria which many patients show, in which they may exhibit a courage and determination which are belied by their subsequent conduct. The material produced can be very helpful, but cannot always be taken at its face value. Certain patients, who are otherwise given to romancing, show this tendency in a remarkable way when under the influence of sodium amytal and tell the most incredible lies. Some physicians seem to possess a special gift in producing fantasies of this kind amongst their patients.

The method should not be used on patients with arterial or kidney disease. During the injection a watch should be kept for a decrease in the depth of respiration, and for a fall of blood pressure as shown by the radial pulse.

During the period of "recovery," patients may be left in the charge of an attendant, and with this proviso the method is applicable to out-patients as well as to in-patients. If reasonable precautions are taken no complications may be anticipated, and in certain hands the method is of very real value.

Prophylaxis.—The value of good selection in reducing the incidence of psychiatric disorders is shown very clearly in the submarine service of the Navy. Unsatisfactory men are either not admitted or are rapidly eliminated, so that the number of submariners who reach the naval psychiatric specialists is negligible.

It is of course much easier to be wise after rather than before the event; but the proportion of those who do break down who give a past history of instability or dullness, or both combined, is so large as to leave no doubt that many should never have been accepted whilst others have been quite clearly wrongly placed.

The reference of a larger number of doubtful men for a psychiatric opinion when they receive their first medical examination at Combined Recruiting Centres after call-up would clearly be desirable, and the recent adoption by the Army of a scheme involving a general probationary period before final acceptance or allocation is clearly a big step in the right direction. This should lead to the early elimination of those who are obviously unsuitable and the better placing of the remainder.

The medical branch of a fighting Service can, however, do much, quite apart from aiding in better selection procedures, or in suggesting transfers when this seems necessary. They must not, of course, go round asking men whether they are not nervous; but they can try to obtain the co-operation of the officers of their unit and of their orderlies (if the latter are sensible) in recognising men who are showing signs of "nerves" in order that they may be treated before they break down. In fact, they must know their men. They can also do everything possible to co-operate with the executive in the prevention of boredom and ensuring such comforts as can be obtained in war-time. They can also make sure that all the men in their unit know that the medical arrangements are as perfect as possible. Although few medical men can give talks on mental hygiene with either credit to themselves or benefit to their audience, they can take the occasion of lectures on first-aid to drop hints to the effect that to experience fear is normal, but to give way to it is wrong, and that the experience of fear is not in itself a valid reason for reporting sick. It is not on the whole wise to go much beyond this, and lectures on the medical aspect of "morale" and the like are strongly to be deprecated unless done by most exceptional people.

Finally, a patient's nervous symptoms must not be ignored; it is not possible to laugh away a neurosis. Again, it must be remembered that patients cannot be expected to accept the reassurance that there is no physical disease without a thorough physical examination. A thorough physical examination can, however, be trusted to exclude the vast majority of physical abnormalities; and it is wise to beware of playing for safety at the expense of a man's self-confidence by betraying doubts that may be felt about the possible presence of physical disease; and above all to beware of the harm that can result from unnecessary hospitalisation, which is unwisely and timorously recommended in order to be on the safe side.

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